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USAID/ZAMBIA EDUCATION DATA ACTIVITY

EARLY-GRADE READING ASSESSMENT IN FIVE TARGET PROVINCES

2018 Baseline Report

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2018 Baseline Report

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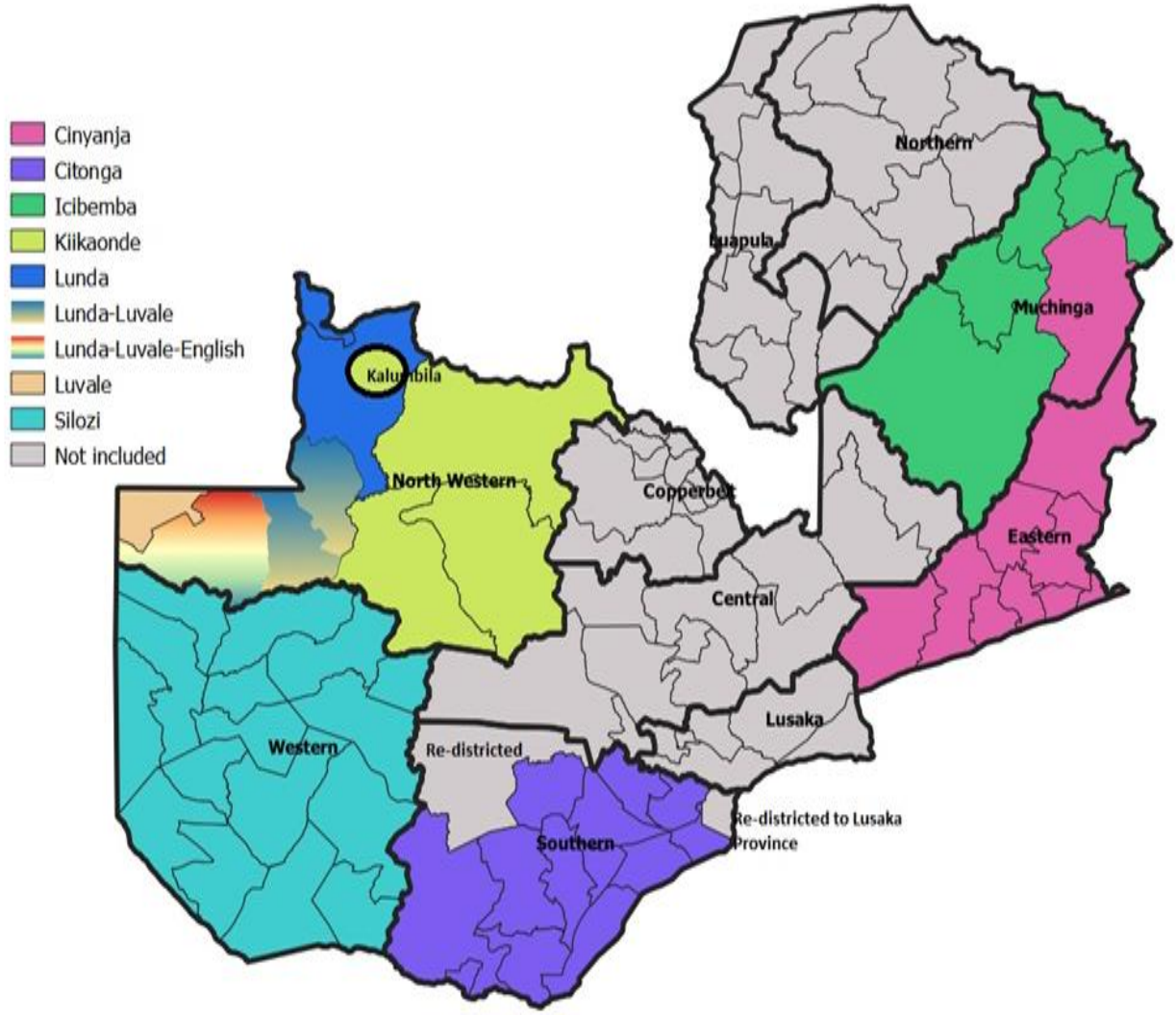
ACRONYMS

clspm	Correct Letter Sounds per Minute
cnonwpm	Correct Non-words per Minute
csspm	Correct Syllable Sounds per Minute
cwpm	Correct Words per Minute
DO	Development Objective
ECE	Early Childhood Education
ECZ	Examinations Council of Zambia
EDC	Education Development Center
EGR	Early Grade Reading
EGRA	Early-Grade Reading Assessment
EMIS	Education Management Information System
GRZ	Government of the Republic of Zambia
IR	Intermediate Result
LoI	Language of Instruction
MoGE	Ministry of General Education
MSI	Management Systems International
ORF	Oral Reading Fluency
QCO	Quality Control Officer
RTS	Read to Succeed
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SSME	Snapshot for School Management Effectiveness
TTL	Time to Learn
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development

MAP SHOWING TARGET PROVINCES AND LANGUAGE OF INSTRUCTION USED IN GRADE 2



SOURCE: LANGUAGE MAPPING EXERCISE REPORT, EDUCATION DATA ACTIVITY, 2018

EXECUTIVE SUMMARY

Primary school completion rates in Zambia are high, at 92.4 percent in 2016 (Ministry of General Education 2017). However, major challenges in learning outcomes persist, especially in relation to literacy rates. In response, USAID/Zambia launched the Let's Read project in January 2019 to improve the ability of Grade 2 learners to read at grade level in five target provinces (Eastern, Muchinga, North-Western, Southern and Western). In April 2018, USAID/Zambia also launched the Education Data activity to complete two Early-Grade Reading Assessments (EGRAs)—a baseline in 2018 and a midline in 2020—to better understand the performance of Let's Read project. This report provides results from the 2018 Baseline EGRA, which establishes a baseline level from which changes in Grade 2 learners' performance in the core reading skills can be tracked over time. Specifically, this 2018 Baseline EGRA intends to address the following questions:

- What is the current reading status of Grade 2 learners?
  - To what extent does gender or school type affect reading performance?
  - Where do the overall baseline reading proficiencies in the GRZ designated languages of instruction relative to MoGE benchmarks and Let's Read project targets?
- What are the significant predictors of oral reading fluency?

Under the Education Data activity, DevTech Systems, Inc., conducted the EGRA baseline in partnership with Management Systems International (MSI). Baseline data collection occurred between October 31 and December 5, 2018.

METHODOLOGY

The Education Data activity used a three-stage process at baseline to select a representative sample in the target provinces: (1) constructing a sampling frame between May and July 2018, (2) selecting a random sample of schools in October 2018 by location, school type, and language type, and (3) selecting a random sample of learners during the baseline in November 2018 within the sampled schools.

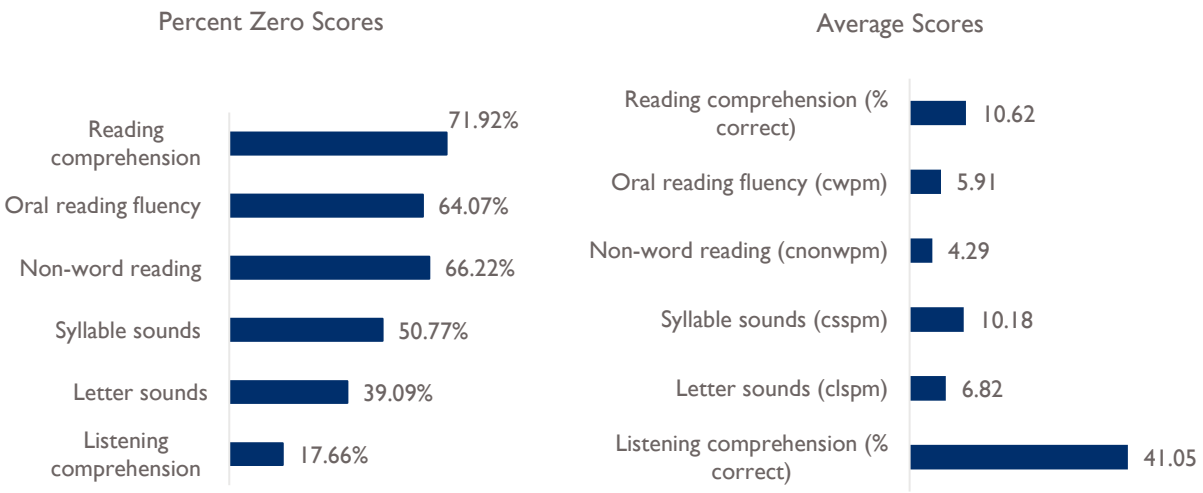
The sample included a total of 816 randomly chosen schools from the five target provinces, of which 630 (77 percent) were Government of the Republic of Zambia (GRZ)-run primary schools and 186 (23 percent) were community-run schools.[1] Overall, 328 schools (41 percent) among the 816 sampled schools had an active Early Childhood Education (ECE) program. Among the GRZ run schools, 283 schools had ECE program while it was 45 among the community schools. The team randomly selected 15,071 Grade 2 learners (51 percent girls and 49 percent boys) in the 816 sampled schools for the assessment. These learners took assessments in one of the seven GRZ-designated languages of instruction (LoIs) of Chitonga, Cinyanja, Icibemba, Kiikaonde, Lunda, Luvale, and Silozi, and in English.

[1] Zambia has two types of primary schools. Government-run primary schools, which make up 63 percent of all schools nationwide, are run by district education offices within the Ministry of General Education (MoGE). Community-run schools, which make up 30 percent of all schools, are often free and run by parents or other community members (Frischkorn & Falconer-Stout 2016).

The team adapted seven EGRA tools—one for each LoI. Each tool comprised seven subtasks aligning with the three stages of early grade reading development: pre-reading, which typically develops from infancy until the pre-primary level; initial reading, which generally develops in Grade 1 and the beginning of Grade 2; and fluency confirmation, which is expected to develop in Grades 2 and 3 (Chall 1983).[2] The EGRA subtasks build on each other to align with the three stages and included: (1) a listening comprehension subtask in the LoI and English and an English vocabulary subtask, to assess the pre-reading stage; (2) letter sound knowledge, syllable identification, and non-word reading subtasks to assess the initial reading stage; and (3) oral reading fluency and reading comprehension subtasks for assessing the fluency confirmation stage. Assessors also administered a Snapshot of School Management and Effectiveness (SSME), which included head teacher, teacher, and learner questionnaires, along with a school inventory, to establish school characteristics and learner demographics in the sampled schools.

KEY FINDINGS

FIGURE 1. PERCENT ZERO SCORES AND AVERAGE SCORES ACROSS ALL LOCAL LANGUAGES AT BASELINE



STAGE 1: PRE-READING IN LOCAL LANGUAGES

LISTENING COMPREHENSION

Nearly one fifth of the learners could not comprehend the story they heard. Overall, 17.66 percent of learners scored zero in the subtask, indicating that they understood very little of the short passage read to them by an assessor. On average, learners were only able to correctly answer two comprehension questions (41.05 percent correct) of the total five questions after hearing the passage. Among the languages, on average learners in Kiikaonde correctly answered 2.91 questions (about 60

[2] For more information, see https://www.learner.org/courses/readwrite/media/pdf/RWD.DLU1.ChallsStages.pdf.

percent correct) which was the highest score, while learners in Cinyanja were able to only answer 1.72 questions correctly (about 30 percent correct) which was the lowest score.

STAGE 2: INITIAL READING IN LOCAL LANGUAGES

Beginning in Grade 1, Zambian learners are taught that letters represent individual sounds that when combined with other letters make up words, and that these words map onto different meanings.[3] As learners progress and practice manipulating different sound and syllable combinations, they begin to decode and then recognize simple words (Kim et al. 2016).[4] Letter sound identification, syllable identification, and non-word reading subtasks included at baseline assessed pre-reading skills.

LETTER SOUND IDENTIFICATION

Forty percent of learners could not correctly identify a single letter sound out of 100 letters. The Ministry of General Education (MoGE) curriculum indicates that all letter sounds are taught in Grade 1 and then reviewed in Grade 2. However, overall, 39.09 percent of learners scored zero, indicating that they could not identify letters or the correct sounds associated with them. Whereas 47 percent of learners in Chitonga and 49 percent of learners in Kiikaonde scored zero, about 30 percent of learners scored zero in Silozi. Overall, on average, learners were able to correctly identify 6.82 letter sounds per minute. By language, average scores ranged from a high of 8.09 correct letters per minute (clspm) in Icibemba to a low of 5.11 clspm in Luvale.

SYLLABLE IDENTIFICATION

Over half of the learners could not correctly identify any of the 100 syllables. Overall, 50.77 percent of learners scored zero in syllable reading. The average overall score was 10.18 correct syllables per minute (csspm). By language, learners in Luvale and Silozi scored on average the highest (14.18 csspm and 13.99 csspm, respectively), while learners in Lunda scored the lowest, with an average of 7.42 csspm.

Scores in syllable reading are slightly higher than the letter sound subtask. Zambian languages are syllabic in nature, and as a result, learners find it easier to read syllables (combinations of one or more consonants and a vowel such as *ba, be, bi, bo, bu*) rather than individual letters such as *b, k,* and *c* on their own.

NON-WORD READING

Over two thirds of the learners could not decode any of the 50 non-words. Overall, 66.22 percent of learners scored zero on the non-word reading subtask, which measures decoding skills. While 56 percent of learners in Silozi scored zero, 71 percent of learners in Kiikaonde scored zero. Overall, on average, learners read 4.29 correct non-words per minute (cnonwpm). By language, learners in Icibemba

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[3] For example, as learners begin to blend the individual "c" – "a" – "t" sounds together to form the word cat, they utilize their vocabulary skills to connect the word with the animal they know.

[4] See Kim et al. 2016 at https://www.globalreadingnetwork.net/sites/default/files/research_files/LandscapeReport.pdf.

scored the highest, with an average of 6.41 cnonwpm, while performance of learners in Kiikaonde was the lowest at 2.92 cnonwpm. Over forty percent of learners lack the pre-requisite letter sound identification skills to enable them to successfully decode the unfamiliar words in the non-word reading subtask.

STAGE 3: FLUENCY CONFIRMATION IN LOCAL LANGUAGES

This stage includes oral reading fluency and reading comprehension subtasks. The learner is tested for the ability to consolidate the pre- and initial reading skills to read a passage with speed, accuracy and comprehension. In order to accommodate the inherent orthographic structure of the languages, the passage selected for testing reading fluency varied by language; the number of words in the passage, depending on the language, ranged from 43 to 57 words. To test oral reading fluency, learners were asked to read as much of a passage as they could within a minute. After the learner read the passage, they were asked to answer up to five comprehension questions related to the passage. The number of questions asked depended on the point at which the learner had stopped reading after one minute.

ORAL READING FLUENCY

Two thirds of learners are non-readers. Overall, 64.07 percent of learners could not read a single word in the passage within a minute, indicating that the majority are non-readers. The lowest share of zero scores was among learners assessed in Silozi (53 percent) and Luvale (56 percent), while the highest share of zero scores was among learners assessed in Chitonga (74 percent) and Kiikaonde (75 percent). Given the high number of zero scores in the sample, the overall average score was also low at 5.91 correct words per minute (cwpm), indicating that learners read with limited speed and accuracy. By language, on average learners in Silozi read almost twice as many correct words per minute than did learners in Kiikaonde (7.65 cwpm in comparison to 3.92 cwpm).

READING COMPREHENSION

Nearly three fourths of learners could not comprehend grade level text. Globally, oral reading fluency is a strong predictor of reading comprehension, since learners' ability to comprehend what they read is highly correlated with their ability to read fluently. Results from the baseline EGRA display this general trend. Overall, 71.92 percent of learners scored zero on the reading comprehension subtask. While 82 percent of learners in Kiikaonde scored zero, only 50 percent in Silozi did. Overall, on average the learners could only correctly answer half a comprehension question (10.62 percent correct), because they did not understand what they read or they could not complete reading the passage within a minute to answer the questions. Uniformly, across all languages, learners on average could not answer even one comprehension question correctly.

PERFORMANCE BY LEARNER SEX

Overall, there was no clear trend of boys or girls consistently outperforming the other across all the subtasks. For example, in listening comprehension, boys on average performed statistically significantly higher in comparison to girls, scoring 43.7 and 38.47 percent, respectively, at the 1 percent significance level. But, in oral reading fluency, girls on average scored significantly higher than boys in that the average score for girls was 6.31 cwpm relative to 5.50 cwpm for boys. In other subtasks, differences between boys and girls were not significant enough to clearly indicate whether one gender performed

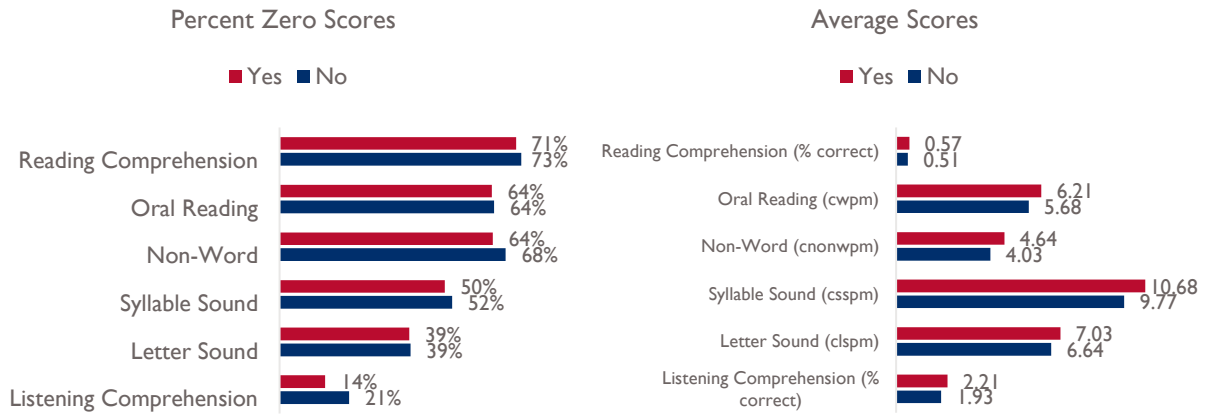
better than the other. By language, there was no clear trend of boys or girls consistently outperforming the other across all subtasks for any language.

PERFORMANCE BY SCHOOL TYPE

Overall, learners in GRZ-run primary schools scored higher on average than learners in community schools. For example, in listening comprehension, learners in GRZ schools on average scored 41.48 percent correct, relative to 38.72 percent correct in community schools; this difference was significant at the 1 percent level. Similarly, learners in GRZ schools on average were able to correctly identify 2.86 more syllables per minute than learners from community-run schools. While learners in GRZ schools read on average 6.19 cwpm, learners in community schools read 4.42 cwpm.

PERFORMANCE BY LEARNER PARTICIPATION IN ECE PROGRAM

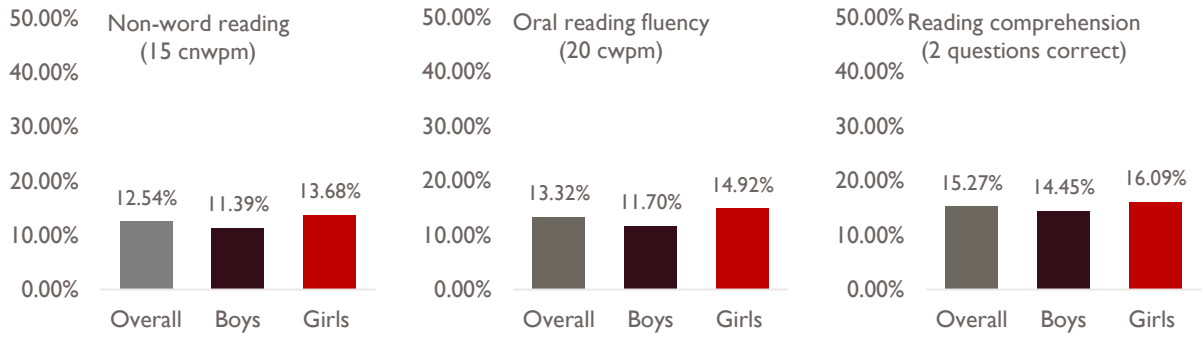
FIGURE 2. PERCENT ZERO SCORES AND AVERAGE SCORES BY ECE ATTENDANCE



Overall, learners who attended ECE performed slightly better than those who did not. As shown in Figure 2, in all subtasks, the share of learners with zero scores was lower among those who attended ECE than among those who did not. Reflecting these lower zero scores, average scores for all subtasks were higher for those who attended ECE than for those who did not. However, these differences were all not statistically significant except for listening comprehension, a pre-reading skill that develops from infancy until the pre-primary stage. Attending ECE could also not significantly predict oral reading fluency scores, perhaps owing to the newness of an ECE curriculum in Zambia. Evidence (Weatherholt et al., 2018; Cambridge Education, 2017) shows that strengthening the ECE curriculum and its implementation could help prepare learners better for transition into Grade 1.

MEETING THE MOGE NATIONAL BENCHMARKS

FIGURE 3. PERCENT OF LEARNERS MEETING NON-WORD READING, ORAL READING FLUENCY, AND READING COMPREHENSION BENCHMAKRS



In 2014, MoGE set the minimum benchmarks for Grade 2 that are applied uniformly across all languages. As shown in Figure 3, in non-word, oral reading fluency and reading comprehension respectively, 12.54 percent, 13.32 percent, and 15.27 percent of learners met the benchmarks. Slightly more girls met the benchmarks in comparison to boys, although the differences were not statistically significant. MoGE's benchmark for oral reading fluency of emergent readers at 20 correct words per minute is associated with a 40 percent reading comprehension, where 40 percent is operationalized at the ability to answer at least 40 percent of comprehension questions correctly. As shown in Figure 3, this refers to 13.32 percent. But, variations were noted by language. While 9.88 percent and 7.21 percent, respectively, in Chitonga and Kiikaonde demonstrated reading fluency with comprehension, it was 17.44 percent and 17.62 percent, respectively, in Silozi and Luvale.

About 10.2 percent of learners demonstrate reading fluency and comprehension of grade level text at the end of Grade 2. Overall, as per the definition of Education Service Indicator 1.1, a total of 10.2 percent of Grade 2 learners demonstrated both reading fluency and comprehension of grade level text. Of this total, 11.84 percent of girls and 8.52 percent of boys demonstrated grade level fluency and comprehension.

About a quarter of the Let's Read Project's 2020 target has been met at baseline. The Let's Read project, under its Objective 2: Meet the Metrics requires that 40 percent of emergent readers attain the MoGE stipulated proficiency levels in non-word reading, oral reading fluency, and reading comprehension subtasks by 2020. At baseline, 8.10 percent of learners met the minimum proficiency levels for all three subtasks. This shows that about a quarter of the Let's Read project's 2020 target of 40 percent is met at baseline.

FACTORS ASSOCIATED WITH ORAL READING FLUENCY

In order to draw programmatic and policy-relevant conclusions and recommendations from the 2018 Baseline EGRA in Zambia, the Education Data team analyzed more than 29 plausible factors drawn from the data obtained through SSME questionnaires to determine whether they could predict overall oral reading fluency scores assessed using the EGRA tools. Using Tobit regression models and including

learners across all languages, the analysis found six factors that were significant in predicting oral reading fluency scores, as discussed below.

Reading at school significantly improves scores. On average, learners who reported that they read books at school today scored 13.59 cwpm higher than learners who did not. However, only 35.7 percent of learners reported reading at school on the day of the assessment. At least 75 percent of learners reported not having local language readers. Head teachers indicated that adequate readers and textbooks at a ratio of 3 pupils to a book are not being distributed on a timely basis. Furthermore, 58.75 percent of learners said that they do not have other reading materials at home for them to read. Low reading performance is consistent with learners not having reading materials at school or home. About two thirds of teachers and over half of head teachers indicated that parents do not conduct classroom observations or check textbook availability.

Someone reading to learners at home significantly improves scores. Scores of learners who reported being read to at home were on average higher by 6.59 cwpm than scores of those who did not. About 64 percent of learners reported being read to at home.

Receiving help with homework significantly improves scores. On average, learners who receive help with homework scored 2.25 cwpm more than learners who did not receive such help. About 69 percent of learners reported that someone at home helps them with their homework. Learners also reported that more than 68 percent of their mothers and more than 78 percent of their fathers can read and write, so it is important to encourage parents to support learners at home.

Teachers saying letter names and sounds significantly improves scores. On average, scores were higher by 3.29 cwpm when teachers said letter names and sounds than otherwise. This factor was the only significant predictor among the several pedagogical practices surveyed. To be able to teach phonics effectively, teachers need to be trained on better, evidence-based teaching approaches. However, only 45 percent of teachers reported that they had participated in an in-service training for EGR in the last year, and only 26 percent had received a coaching visit from a district education official in the last year. About 63 percent of teachers reported having the official MoGE teachers' guides on teaching Grade 2 literacy; within that group, 83 percent reported using the guides most of the time or all the time. Only one in three reported using textbooks to teach reading. Other materials such as worksheets (4 percent), story books (13 percent), and flashcards (15 percent) also appear to be rarely used. The low level of reading skills might be linked to flexible use of the existing guides or the need for additional guides to help teachers implement them well in classrooms. Also, in Zambia, most teachers learned to read letter names (the alphabet) as learners, so it is difficult for them to master letter sounds, and they fail to distinguish sounds in a local language, for example, "a" and "e"; "l" and "e"; and "k" and "c". (Matafwali and Bus 2013). Further, teachers are sometimes posted to areas where they do not speak the designated LoI and thus find it difficult to teach reading (Folotiya 2014). It is likely that learners may not be taught the correct letter sounds if teachers did not receive explicit training to ensure that they themselves know the letter sounds.

Praising learners significantly improves scores. On average, when teachers praise learners when they do well in class, scores improved by 2.87 cwpm. About 73 percent of learners said that their teacher praises them when they do well in class. This factor was the only significant one associated with oral reading fluency scores among the positive teacher behaviors including giving a prize, or with other behaviors such as asking again, correcting mistakes, or hitting learners when they do not do well.

Having a school library is a significant predictor of higher scores. Learners in schools with a library scored 7.243 cwpm higher than learners in schools without a library, likely because school libraries could provide resources for learners to continue their learning in between classes and outside school.[5] When there was a library at school, 31.2 percent of learners reported bringing books home to read, but when there was none, only 24 percent of learners brought books home from school to read. Only 41.25 percent of learners reported having other reading materials at home. But, 86 percent of schools did not have a library, and in 5 percent of the schools, learners did not use the library even if it was present. In Zambia, most schools in rural areas do not have libraries. Therefore, these schools tend to encourage teachers to mobilize some reading materials, books, and readers for their classroom bookshelves or mobile libraries.

LANGUAGE SPOKEN BY LEARNERS AT HOME

Overall, a quarter of the learners are learning in a language that is not the primary language spoken at home. However, the results varied by language. While 89.52 percent of learners assessed in Lunda also reported Lunda as their primary language spoken at home, only 50.56 percent of learners assessed in Icibemba spoke Icibemba as the primary language at home. But, learners speaking the LoI at home did not significantly predict improvements in overall oral reading scores. This indicates that some children are learning in a second language and as such may require additional instructional support to build their vocabulary and listening comprehension skills to enable them to learn to read in the LoI. Evidence suggests that children learn to read best in a language they know and understand (Kim et. al. 2016; UNESCO 2014). Learners who are second language learners require additional instructional support to help map meaning onto the words they read because they lack the requisite oral language and vocabulary skills in the LoI (Kim et al. 2016).

LEARNER PARTICIPATION IN ECE PROGRAMS

The majority of learners do not attend ECE.[6] Overall, 44.63 percent of learners self-reported that they attended ECE, either in the school in which they are currently enrolled or elsewhere in Zambia. While 45.87 percent of learners currently enrolled in GRZ schools reported attending ECE anywhere in Zambia, only 37.99 percent of learners enrolled in community schools reported attending ECE anywhere

[5] Evidence from EGRAs conducted in Malawi also found that having a school library predicted higher oral reading fluency scores. See https://pdf.usaid.gov/pdf_docs/PA00T3Q4.pdf. 2017.

[6] In 2012, MoGE introduced the annexing of some government-run and community ECE centers for learners who are five to six years old. While enrollment in ECE in Zambia has increased from 15.3 percent in 2004 to 27 percent in 2016, most learners in Zambia still lack access to ECE (MoGE 2016).

in Zambia. Girls were slightly more likely to attend ECE (46.63 percent) in comparison to boys (42.54 percent). Whereas 70 percent of learners tested in Chitonga reported attending ECE, in every other language at most only 39 percent of learners attended ECE. Chitonga is primarily spoken in the Southern province, whose principal economic sector is tourism. As a result, there may be more resources to invest in ECE programs in primary schools and the socioeconomic status of learners may be on average higher to allow them to afford ECE. However, attending ECE was not significantly associated with overall oral reading fluency scores.

CONCLUSIONS

At baseline, learners in the five target provinces exhibited low alphabetic knowledge and decoding skills. Learners in all languages struggled with letter sounds, syllable sounds, and non-word reading, which are prerequisites to read fluently. Decoding skills captured by syllable sounds and non-word reading are strongly correlated with oral reading fluency, and oral reading fluency is closely related to reading comprehension. As a result, low performance in each of these subtasks is highly predictive of oral reading fluency and reading comprehension skills.

Most Grade 2 learners could not read fluently and comprehend grade level text. Only about 10.2 percent of learners were able to read fluently and comprehend grade level text at the end of Grade 2 indicating that learners understood and recalled very little of the content in the passage they read. Also, with only about a quarter of the Let's Read project's 2020 target of 40 percent being met at baseline, there is a large gap for the project to close for it to reach its target.

Oral reading fluency can be improved through reading practice, teaching methods, and availability of reading materials. Baseline results indicate that reading fluency scores tend to improve when learners have more practice reading at school and home; teachers use evidenced-based instructional practices in reading and provide positive feedback to learners when they do well; reading materials are available to learners at school and in school libraries and used by them; and the home and family environment supports learners.

Attending ECE was low and oral reading fluency scores were not significantly higher for learners that attended ECE relative to those that did not. However, attending ECE could potentially improve development of learners' reading skills as evidenced in many developing countries through a positive relationship between ECE attendance and early grade reading skills (Yoshikawa & Kabay 2015; Weatherholt et al., 2018). The limited access to ECE and attendance in Zambia could therefore limit learners' ability to sufficiently develop skills to transition into Grade 1, and eventually contribute to the low levels of reading fluency and comprehension skills.

Overall, a quarter of the learners are learning in a language that is not the primary language spoken at home. This indicates that some children are learning in a second language and as such may require additional instructional support to build their vocabulary and listening comprehension skills to enable them to learn to read in the LoI. Evidence suggests that children learn to read best in a language they know and understand (Kim et. al. 2016; UNESCO 2014). Learners who are second language learners require additional instructional support to help map meaning onto the words they read because they lack the requisite oral language and vocabulary skills in the LoI (Kim et al. 2016).

RECOMMENDATIONS

Focus on developing learners' alphabetic knowledge and decoding skills. Policymakers and practitioners should focus on supporting learners to develop these fundamental skills to provide a strong foundation for oral reading fluency. Globally, evidence suggests that teachers need explicit training on how to teach reading skills, and yet many teachers in developing countries do not receive comprehensive training that focuses on teaching reading (Kim et al. 2016). At baseline, only 45 percent of teachers reported that they had participated in an in-service training for EGR in the last year, and only 26 percent had received a coaching visit from a district education official in the last year. Therefore, teachers should be trained on how to provide explicit instruction covering the five reading skills (phonics, phonemic awareness, vocabulary, fluency, and comprehension) and supported by a robust coaching component as they put new skills into practice in the classroom. Further, targeted training in evidence-based approaches that support second language acquisition in schools with a higher percentage of second language learners should be provided since overall a quarter of the learners are learning in a second language. All teachers should have MoGE-designated Grade 2 teachers' guides so that they can prepare their lessons during their free time or follow lesson procedures in accordance to the guidelines in the teachers' guides. Training should also include ample practice on how to use the Grade 2 teacher guides that MoGE developed or revised in all local languages. Also, policymakers and practitioners should assess resources such as audio files developed for teaching letter sounds and syllable sounds developed under earlier projects for some languages (Education Development Center 2018) for their effectiveness as teaching aids. If the resources are found to be effective, they could be produced in all seven languages to help teach letter and syllable sounds.

Encourage parents and household members to read to learners regularly. Reading fluency scores are clearly shown to improve with someone at home reading to learners, among other factors. This robust relationship suggests an excellent opportunity for community level programs to support children's exposure to reading at home by encouraging parents and guardians to read to their children on a regular basis. The USAID-funded Read to Succeed activity in Zambia implemented community-level awareness campaigns to improve parental and community involvement in schools and provide support to learners (RTI International 2015). Therefore, Let's Read project should ensure that lessons learned from these past experiences inform the rollout of these new activities to ensure that the results are sustainable. Moreover, reading fairs can be held to promote such parental behavior. Save the Children's Literacy Boost project included reading fairs and activities to support parents reading with their children that proved effective (Save the Children 2012). Results from the Literacy Boost project in both Pakistan and Malawi suggest that after-school reading clinics staffed by community and youth volunteers as mentors help ensure that learners are read to more regularly and practice reading outside the classroom. Evidence also suggests that community radio can also be effectively used to play entertaining skits that promote reading to children with measured impact (Education Development Center 2010).

Improve access to adequate and appropriate reading materials, and their use at school. Adequate textbooks and appropriate reading materials, including supplementary reading materials developed through the Let's Read project, should be made more readily available for children to read at school and take home. Since reading scores tend to improve with learners being read to at home and among learners who have access to a school library, MoGE should also work with international and local partners to build and stock school libraries nationwide so learners have access to a wide range of reading materials to use, and are also encouraged to use them well. Furthermore, MoGE and the Let's Read

project should partner to develop contextually relevant books to be distributed in community book banks to support reading at home. The Literacy Boost program in Malawi included a community book bank component and found that children who brought home and read books from the book bank had significantly higher vocabulary gains over those who did not (Save the Children 2012).

Ensure improvements in learning outcomes continue to be equal among boys and girls. Evidence suggests that learners with stronger reading skills may be less likely to repeat grades and more likely to complete primary school (Kim et al. 2016). Therefore, all interventions should focus on ensuring that the current lack of gender gap in Zambia is maintained to avoid learning inequities. After school clubs staffed by local mentors in some African countries have been shown to be gender neutral in improving reading skills (Save the Children 2012).

Increase access to and quality of ECE programming to build learners' pre-reading and initial reading skills. MoGE should continue its efforts to expand access to ECE programs, especially in rural and disadvantaged areas. Also, the ECE curriculum should be strengthened to help learners develop pre-reading skills such as letter sounds to transition better to Grade 1, where they could learn to decode in order to attain reading fluency by Grade 2. Let's Read project aims to strengthen ECE programs under its Let's Get Ready sub-strategy by translating the existing MoGE teachers' guides, developed with support from UNICEF, into all seven languages and by disseminating them to ECE teachers. In addition, Let's Read project also aims to develop and provide ECE classroom resource kits and train ECE teachers to use these materials. The Let's Read project should also support increased access to ECE programs through employing social and behavioral change communications (SBCC) strategies to raise awareness among parents and community members on the importance of early childhood stimulation and play. While SBCC approaches have had measured impact in supporting behavior change in the health sector, a USAID study concluded that SBCC strategies may hold potential in supporting parental and community engagement in early grade reading programs as well (Schmidt 2014). There has not been enough research to determine with confidence the impact of ECE programs on reading performance in the primary grades (Kim et. al. 2016). Therefore, special studies should examine the effects of ECE interventions on pre-reading skills to inform improvements and support evidence-based policymaking.

Develop language-specific benchmarks to account for inherent differences among LoIs. The MoGE benchmarks developed in 2015 apply uniformly across all seven GRZ-designated LoI and were used by Let's Read project to set its targets. But, inherent structural differences among languages cause scores to differ by language. Therefore, benchmarks should vary by languages. While an overall target across languages could be used (for example, the target of 40 percent set by Let's Read project), setting benchmarks by language will help account for inherent language differences and yield robust results to enable better monitoring of changes over time.

Embed a process evaluation to examine the links between Let's Read project activities and reading performance. Future external evaluations should include assessing the fidelity of the Let's Read project's implementation alongside learner assessments to understand how it achieved its intended outcomes. In addition, classroom observations should be conducted to understand the degree to which teaching training and coaching components lead to the uptake of new instructional methods. In countries where baseline levels are low, it is challenging to move a large share of non-readers to reach minimum standards for reading in just a few years, although evidence suggests that projects that include training on evidenced-based curricula, instructional guides and materials, and a robust coaching component can shift

the status quo from baseline to midline in two years (Kelly and Graham 2018). In addition, detailed data on implementation costs should be gathered and compared with reading performance to understand the cost effectiveness of the interventions and to provide valuable data to inform MoGE's programmatic and policy decisions.

INTRODUCTION

Primary school completion rates in Zambia are high, at 92.4 percent in 2016 (Ministry of General Education 2017). However, major challenges in learning outcomes persist, especially in relation to literacy rates. In 2011, Grade 6 learners in all Zambian provinces on average scored 66 points below the mean scaled score of 500 in reading on the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) study (Musonda and Kaba 2011). The 2014 Grade 5 National Assessment showed a downward trend in average performance across all languages. In literacy, the average score in English oral reading dropped by 2.1 percentage points to 32.1 percent from 2012 to 2014. In the Zambian Languages, the drop was 1.7 percentage points, declining from 36.8 percent in 2012 to 35.1 percent (Ministry of General Education 2014). In response to these low literacy results, the current Ministry of General Education (MoGE) literacy strategy emphasizes reading instruction in the seven Government of the Republic of Zambia (GRZ)-designated languages of instruction (LoIs) (Chitonga, Cinyanja, Icibemba, Lunda, Luvale, Kiikaonde, and Silozi) in primary schools until Grade 4, and then in English. To complement GRZ efforts, United States Agency for International Development (USAID)/Zambia funded the Let's Read project, which aims to improve the ability of Grade 2 learners to read at grade level in the five target provinces (Eastern, Muchinga, North-Western, Western, and Southern). The Let's Read project began in late 2018. USAID/Zambia also funded an Education Data activity beginning in April 2018 to provide distinct assessment, data management, research, and evaluation services to monitor and track the progress of USAID's Let's Read project.[7]

BASELINE ASSESSMENT PURPOSE AND QUESTIONS

In order to establish a baseline to show changes in Grade 2 learners' reading skills under the Let's Read project, the Education Data activity, in partnership with MoGE, conducted a baseline Early-Grade Reading Assessment (EGRA) with Grade 2 learners at the end of the 2018 academic year in the five target provinces. The Education Data activity developed several questions for the baseline assessment, including:

- What is the current reading status of Grade 2 learners?
    - To what extent does gender or school type affect reading performance?
    - Where do the overall baseline reading proficiencies in the LoIs relative to the MoGE national benchmarks and Let's Read project target?
- What are the significant predictors of oral reading fluency?

The baseline included a random sample of 15,071 Grade 2 learners, of which 50.99 percent were girls and 49.01 percent were boys, drawn from a sample of 816 primary schools in the five target provinces. The 816 sampled schools are representative of the seven LoIs, locations, and school types, including GRZ-run public or community schools.

This report presents the methodology and results of the 2018 EGRA baseline so that changes in Grade 2 learners' performance in core reading skills can be tracked over time. The baseline results may also help

[7] See Annex 12 for Scope of Work of Education Data activity.

USAID and GRZ design programs and formulate policies to improve primary school learners' reading skills in Zambia in the future.

EDUCATION DATA ACTIVITY INDICATORS

This baseline report also includes results on the following performance indicators as per the USAID-approved Education Data activity's Monitoring, Evaluation, and Learning plan:

- Education and Social Service (ES). 1.1: Percent of learners who demonstrate reading fluency and comprehension of grade level text at the end of Grade 2 with USG assistance. This indicator captures USAID's Standard Foreign Assistance (F) Indicator. The indicator contributes to Development Objective (DO) 3—Human Capital Improved, Intermediate Result (IR) 3.1—Educational Achievements in Reading and Math, and Sub-IR 3.1.2—Government-run Public or Community School Performance Increased. In Zambia, MoGE set benchmarks in 2014 for emergent learners. Using MoGE's benchmarks, the indicator measures percent of learners who meet at least oral reading fluency score of 20 correct words per minute and answers at least 40 percent of comprehension questions correctly.

- Indicator 1.3: Number of people who completed training as assessors or supervisors (Quality Control Officers, or QCOs) to conduct EGRA.[8] This indicator contributes to Activity IR Indicator 1—Number of EGRA Available for Use by USAID and MoGE.

- Indicator 1.4: Number of schools in which EGRA is completed.[9] This indicator contributes to Activity IR Indicator 1—Number of EGRA Available for Use by USAID and MoGE.

OVERVIEW OF EGRA

Despite significant progress in improving access to primary school in the last decade, children in low-income countries are not mastering the reading skills needed for further learning (World Bank 2017). When learners lack these foundational reading skills, governments and households see stunted returns on the huge investments they make in education (UNESCO 2010). Reading enables children to learn independently and progress successfully through the school system. It is important that education systems regularly assess learners' reading skills in the early grades of primary school. Early grade reading skills can be assessed through an instrument called an Early-Grade Reading Assessment (EGRA), which is designed to measure foundational reading skills that children need to read fluently and with comprehension. EGRAs are often administered to a representative sample of learners across schools and provinces to provide data to stakeholders to inform decision-making (RTI International and IRC, 2011).

Reading acquisition is a developmental process. Advanced early grade reading skills such as reading fluency and comprehension build on initial reading skills such as phonemic awareness, letter sound knowledge, and decoding (Chall 1996). Therefore, performance in the initial reading skills could predict a learner's

[8] Individuals who attend at least four days of training and achieved a gold standard score above 90 percent are reported for this indicator.

[9] In each school, assessors assessed up to 20 (10 boys, 10 girls) Grade 2 learners in one of the GRZ-designated LoIs.

reading achievement in later learning stages. See Annex 9 for more information on the three stages of reading. EGRAs typically measure reading skills including alphabetic knowledge, phonics or decoding, vocabulary, reading fluency, and reading comprehension. Alphabetic knowledge is the ability to identify both letter names and the individual sounds that correspond to letters. As learners progress, they begin to apply those sounds to decode or read words. With enough practice, learners' phonics skills help them develop automaticity, or the ability to instantly recognize common words. This enables learners to read with fluency or with ease, increasing speed and accuracy. Fluency is essential for learners to be able to comprehend what they are reading. Without fluency, learners use their working memories to sound out the individual letters in words, leaving insufficient space to also extract meaning (Abadzi 2006). Comprehension—the ultimate goal—allows readers to draw pleasure and learn new things from texts.

BASELINE ASSESSMENT SAMPLING METHODOLOGY, TOOLS, AND LIMITATIONS

Between May and September 2018, the Education Data activity collaborated with the Examinations Council of Zambia (ECZ) to plan and prepare the 2018 Baseline EGRA. Tasks during this stage included sample selection, finalizing EGRA tools in the seven languages and questionnaires for conducting a Snapshot for School Management Effectiveness (SSME), and training of QCOs and assessors to conduct data collection. This section discusses the baseline assessment's preparation, data analysis methods, and study limitations. Annex 11 includes a complete set of the EGRA tools in seven local languages as well as the SSME tools, and Annex 10 includes additional information on the methodology used to adapt the EGRA to seven languages, pilot test and finalize the tools, and recruit QCOs and assessors.

SAMPLING METHODOLOGY

The Education Data activity used a three-stage process to select the baseline EGRA sample: (i) constructing a sampling frame in May–July 2018, (ii) selecting the sample of schools in October 2018, and (iii) selecting the sample of learners during the baseline in November 2018.

STAGE 1 - CONSTRUCTING SAMPLE FRAME: Since the existing MoGE database of schools is outdated, the Education Data activity conducted a language mapping exercise to construct a valid sampling frame (see USAID Education Data Activity 2019). Through this exercise, the Education Data activity compiled a list of all GRZ-run public or community primary schools in the target provinces disaggregated by designated LoI within each district, presence of an Early Childhood Education (ECE) program, and school location. As shown in Table 1, the exercise listed 4,626 GRZ-run public or community schools in the 58 districts within the five target provinces. Of these 4,626 schools, 2,032 schools (44 percent) have ECE programs. The exercise identified one predominant GRZ-designated LoI in each of the provinces, except North-Western, where the team identified three LoIs. The database served as the sampling frame and helped ensure that EGRAs could be administered in each province's predominant LoI plus any other GRZ-designated language(s) identified as LoIs in individual districts and schools.

TABLE 1. NUMBER OF GOVERNMENT-RUN PUBLIC OR COMMUNITY PRIMARY SCHOOLS IN THE SAMPLE FRAME BY LANGUAGE, SCHOOL TYPE, AND SCHOOL LOCATION

PROVINCE	LANGUAGE	POPULATION OF SCHOOLS (NUMBER)						
		TOTAL	SCHOOL TYPE				LOCATION	
			GRZ	GRZ+ECE	COMM	COMM+ECE	URBAN	RURAL
Southern	Chitonga	1,118	147	594	160	217	324	792
Eastern	Cinyanja	1,238	414	535	214	75	161	1077
Muchinga	Icibemba	525	307	85	133	0	21	504
North-West	Kiikaonde	338	165	100	61	12	61	277
North-West	Lunda	205	105	39	61	0	6	199
North-West	Luvale	212	117	44	49	2	5	207

Western	Silozi	990	476	282	185	47	116	874
Total		**4,626**	**1,731**	**1,679**	**863**	**353**	**694**	**3,930**

STAGE 2 - SELECT SAMPLE SCHOOLS: The assessment team randomly selected 816 schools[10] from the sampling frame to be a representative sample for the baseline using a two-step process.[11] The process ensured that the sample was robust and adequately representative of province, district, and school characteristics. The sample size distribution is shown in Table 2.

In step 1, schools were randomly selected in each district proportional to total number of urban and rural schools in order to represent all types of schools in the sample. The variation in the sample size by location was accounted for during the data analysis using sampling weights. In step 2, within each rural and urban location category, a sample of schools were selected randomly in proportion to GRZ run public schools with and without ECE or community schools with and without ECE program. As a result, for each language, a representative sample of schools was selected for each school type and location in order to make generalizable inferences about Grade 2 learners' ability to read and understand grade appropriate text. The sampling procedure ensured that all the districts had an adequate number of sample schools to provide reliable and valid data about learners' reading learning outcomes.

TABLE 2. NUMBER OF SAMPLE SCHOOLS BY LANGUAGE, SCHOOL TYPE, AND SCHOOL LOCATION

PROVINCE	LANGUAGE	SAMPLE SIZE (NUMBER OF SCHOOLS)						
		TOTAL	SCHOOL TYPE				LOCATION	
			GRZ	GRZ+ECE	COM	COM+ECE	URBAN	RURAL
Southern	Chitonga	156	25	77	25	29	48	108
Eastern	Cinyanja	149	46	74	23	6	9	140
Muchinga	Icibemba	90	53	17	20	0	1	89
North-West	Kiikaonde	86	50	26	9	1	16	70
North-West	Lunda	82	47	18	17	0	1	81
North-West	Luvale	88	44	22	21	1	1	87
Western	Silozi	165	83	49	25	8	14	151

[10] A total of 1,015 schools are contractually required for the EGRA baseline. However, due to time constraints to complete the baseline before schools closed in early December, examination period in November, and sample size determined based on sample size calculations a total of 816 schools (17.6 percent of the total schools mapped in the five provinces) were included in the baseline and agreed upon with USAID.

[11] Similar technique was used by ECZ for a nationwide EGRA conducted in April 2018.

Total	**816**	**348**	**283**	**140**	**45**	**90**	**726**

STAGE 3 - SELECT SAMPLE LEARNERS: The assessment team randomly selected up to 10 boys and 10 girls from the Grade 2 class roster within each of the sampled schools during baseline data collection. If the selected learner from the roster was not present or declined to participate, an alternate learner was chosen. The sample included a total of 15,071 learners, of which 50.99 percent were girls and 49.01 percent were boys. Table 3 displays the learner sample included in the baseline for each LoI.[12] These learners were tested for their reading skills in one of the GRZ-designated LoI in addition to English oral skills, and were also administered a short survey as discussed later in the report.

TABLE 3. NUMBER OF SAMPLED LEARNERS, BY LANGUAGE OF INSTRUCTION AND LEARNER SEX

PROVINCE	LANGUAGES	GIRLS	BOYS	TOTAL
Southern	Chitonga	1,480	1,483	2,963
Eastern	Cinyanja	1,407	1,355	2,762
Muchinga	Icibemba	847	807	1,654
North-West	Kiikaonde	827	805	1,632
North-West	Lunda	777	798	1,575
North-West	Luvale	770	695	1,465
Western	Silozi	1,577	1,443	3,020
Total		7,685 (50.99%)	7,386 (49.01%)	15,071 (100%)

EDUCATION DATA ACTIVITY INDICATOR 1.4 RESULT. A total of 15,071 Grade 2 learners (50.99 percent girls; 49.01 percent boys) from 816 schools representative of LoI, location, and school type in the target provinces were assessed at baseline.

TEACHERS AND HEAD TEACHERS: In addition to assessing learners, assessors interviewed the head teacher and one Grade 2 class teacher in each of the sampled schools to collect information about factors associated with teaching, learning, school management and leadership, and parental involvement in schools.[13] Although the team planned for one Grade 2 teacher to be chosen at random at schools with multiple Grade 2 teachers, all sampled schools only had one Grade 2 class teacher. When the teacher was absent on the day of the visit, to the maximum extent feasible, assessors conducted interviews by phone.

[12] While assessors made all attempts to assess close to 20 learners, equally divided between boys and girls, in each sampled school for the baseline, there were several challenges in achieving the target. Nonetheless, the sample included 20 learners in 92 percent of sampled schools except for Luvale LoI, where this number was 83 percent because 17 of the 88 sampled schools had a Grade 2 enrollment of fewer than 20 learners.

[13] Assessing learners and interviewing a Grade 2 teacher allows the results from learners' reading performance to be correlated with teacher classroom practices.

Assessors also conducted a school inventory in each of the sampled schools. The head teacher interviews and school inventory were completed in all 816 sampled schools. However, teacher interviews could only be completed in 801 schools (98 percent of the sample) because some teachers absent on the day of data collection were unavailable for a later phone interview.

DATA COLLECTION INSTRUMENTS

During data collection, assessors and QCOs administered EGRA tools to learners, along with the SSME tools, which included head teacher, teacher, and learner questionnaires and a school inventory. The tools are described below and they helped establish school characteristics and learner demographics.

READING ASSESSMENT INSTRUMENTS

Learners in the early grades in the Eastern, Muchinga, North-Western, Southern, and Western provinces in Zambia are taught in one of seven LoIs, along with English as a subject. A team composed of Education Data activity, ECZ, MoGE, and Curriculum Development Center (CDC) representatives adapted EGRA tools to seven languages (See Annex 10 for details). The team included seven subtasks in the EGRA tool. Since Zambian languages are syllabic in nature, the team determined that learners would be more familiar with reading syllables (combinations of one or more consonants and a vowel, such as ba, be, bi, bo, and bu) than individual letter sounds. Therefore, the team included a syllable identification subtask in addition to letter sound identification in the assessment tool.

The 2018 Baseline EGRA subtasks align with Chall's (1983) three stages of reading—pre-, initial, and advanced reading—as shown in Table 4. The listening comprehension and English vocabulary subtasks in the EGRA assess pre-reading skills. Initial reading skills include the letter sound, syllable identification and non-word reading subtasks; and fluency confirmation includes both the oral reading fluency and reading comprehension subtasks (see Annex 9 for more details). The various EGRA subtasks are arranged in order of difficulty, which allows assessing the children whose abilities are still at the early stages of reading.

TABLE 4. SUBTASKS AND READING SKILLS ASSESSED IN THE 2018 BASELINE EGRA

SUBTASK	EARLY READING SKILLS	STAGE OF LEARNING	SKILL DEMONSTRATED BY LEARNERS' ABILITY TO
1. Listening comprehension	Listening comprehension	Pre-reading	Respond to literal and inferential questions about a text the enumerator reads to them *(Untimed task)*
2. Letter sound identification	Alphabet knowledge	Initial Reading	Provide the sound of letters presented in both upper and lower case in a random order *(Timed task)*
3. Syllable Identification	Phonics or decoding	Initial Reading	Provide sound of syllable combinations presented in random order *(Timed task)*
4. Non-word reading	Phonics or decoding	Initial Reading	Make letter-sound (grapheme-phoneme correspondences) through the reading of simple nonsense words *(Timed task)*
5. Oral reading passage and reading comprehension	Fluency, comprehension	Advanced Reading	Read a text with accuracy, with little effort, at a sufficient rate *(Timed task)* Respond correctly to different types of questions, including literal and

			inferential questions, about the text they have read
6. English vocabulary	Vocabulary	Pre-reading	Identify body parts, objects in the classroom environment, and spatial relationships indicated by the enumerator *(Untimed task)*
7. English listening comprehension	Listening comprehension, oral language	Pre-reading	Respond to literal and inferential questions about a text the enumerator reads to them *(Untimed task)*

The team developed three stories to use for listening comprehension or reading comprehension subtasks and decided to use one of them across all seven languages. However, the pilot results indicated the need to select stories based on language, since the psychometric properties (i.e., difficulty, discrimination, and reliability) were not similar across languages for the same story. Therefore, the team decided to use different listening comprehension and oral reading passages for different languages, as shown in Table 5.

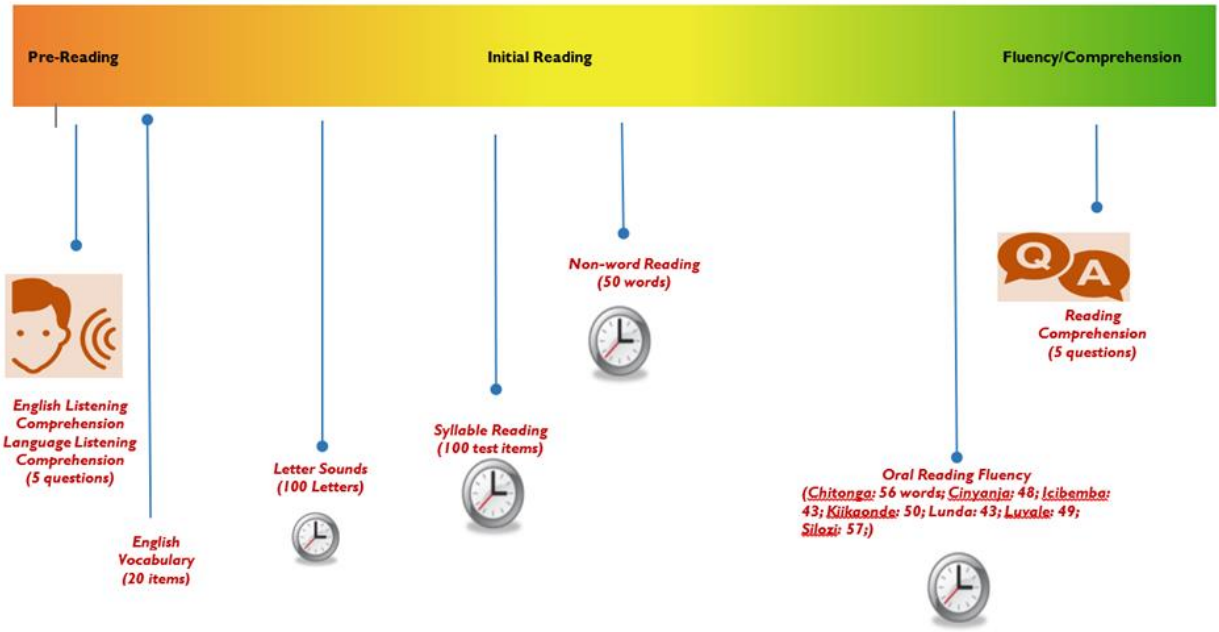
TABLE 5. STORIES SELECTED FOR COMPREHENSION SUBTASKS BY LANGUAGE

STORY	CHITONGA	CINYANJA	ICIBEMBA	LUNDA	LUVALE	KIIKAONDE	SILOZI
Story 1 Listening	River	Singer	Singer	Singer	Singer	School and present	River
Story 2 Oral reading	Chilumba, whose father was a fisherman	Child in Grade 2	Hatching chicken	Child in Grade 2	Child in Grade 2	Hatching chicken	Child in Grade 2

Whenever the same story was used across multiple languages (for example, the story on a singer was used for Cinyanja, Icibemba, Lunda and Luvale for listening comprehension), the number of words in each language varied because of differences in orthography and expressions/vocabulary to express the same idea. For example, "I am going to the store" in English is expressed in six words, but in Spanish, the same idea can be expressed in four words: "Voy a la tienda." Similarly, in the Zambian languages the English "Baby does not drink tea" can be expressed in three words in Chitonga ("Mwana tanywi tii") and five words in Kiikaonde ("Mwana kechi utoma chii ine"). Therefore, even though Zambian languages are transparent and use consistent vowels (a, e, i, o, u) with CV, VCV, CCV, and CCCV word combinations, different languages use different numbers of words to express the same ideas. Hence, even when passages across languages had the same story, the stories used different numbers of words.

Figure 4 illustrates the subtasks included in the baseline EGRA tools. Across all seven Zambian languages, the number of test items included for each subtask was uniform, except for the number of words included for the oral reading fluency subtask. For example, the number of letters to test letter sounds was 100 in all language tools. But, the number of words in the passage used to test oral reading fluency varied between 43 in Icibemba to 57 in Silozi to reflect the language's complexity of expressions as discussed above.

FIGURE 4. SUBTASKS INCLUDED IN THE BASELINE EGRA TOOLS



SNAPSHOT OF SCHOOL MANAGEMENT EFFECTIVENESS (SSME) QUESTIONNAIRES

Learners' reading abilities are related to many external and internal factors (World Bank 2017). Therefore, in addition to the EGRA tools, the assessment team developed the following SSME tools to better understand how various contextual factors relate to learners' reading abilities in the target provinces.

LEARNER QUESTIONNAIRE: Each learner who participated in the EGRA also completed a learner questionnaire. The instrument included questions covering learners' attitudes toward school, whether they attended an ECE center prior to Grade 1, their attendance during the previous week of school, whether they read books in school, and whether they are read to at home and by whom.

TEACHER QUESTIONNAIRE: One Grade 2 class teacher in each of the sampled schools responded to the teacher questionnaire. The tool included a range of questions on teacher qualifications, classroom practices related to reading, school management, and parental involvement in schools.

HEAD TEACHER QUESTIONNAIRE: Assessors administered this questionnaire in person to head teachers, deputy head teachers, or, in some cases, acting head teachers through an interview at each sampled school. The tool included questions on their qualifications, the types and numbers of teacher trainings offered in their schools, the general school environment including the availability of resources, and the level of community involvement in the school.

SCHOOL INVENTORY CHECKLIST: Assessors completed an inventory checklist at each of the sampled schools through a structured observation of the school grounds. The instrument indicated the resources and facilities that are readily available at the school such as whether there are functioning toilets,

Myna Application

In the past, the application "Tangerine" developed by RTI has been used in Zambia to electronically administer EGRA tools. For the 2018 Baseline EGRA, the Education Data activity used the "Myna" application developed by Management Systems International (MSI). MSI developed Myna as an improvement over Tangerine, with several distinct features including a form builder to construct all the EGRA instruments and survey questionnaires, and a dashboard for monitoring assessors during the training and during data collection. These features allow for easy upload of instruments onto the tablets and real time monitoring of assessors.

electricity, and libraries, as well as other items related to the physical and environmental conditions of the school.

All EGRA and SSME tools used at baseline are presented in Annex 11.[14] All these tools were approved by the Ethical Review Committee for an Institutional Review Board in the U.S. in September 2018 and pilot tested and validated by ECZ, MoGE, and USAID.[15] The final versions of the EGRA and SSME tools were programmed into Myna application (see box) and uploaded onto electronic tablets to be used at baseline.

TRAINING OF QCOS AND ASSESSORS

Once the instruments were finalized, the Education Data activity recruited 58 QCOs and 119 assessors. Of these, 32 percent were drawn from the GRZ. About 48 percent of the recruits reported prior experience conducting EGRAs.

A master trainer with three assistants trained 58 QCOs in Lusaka from October 17 to 20, 2018. During the training, the participants learned (1) child protection guidelines, (2) data collection protocols as outlined in the Test Administration Manual, (3) how to collect data using tablets, (4) how to administer the EGRA and SSME tools, (5) how to conduct the inter-rater reliability (IRR) assessments, (6) learner sampling protocols, and (7) how to administer the quality assurance checklist during data collection. Trainers used several videos to add value to the training.

Following the QCO training, three master trainers and four assistants conducted an assessor training in Lusaka from October 22 to 25, 2018. The training covered all the topics from the QCO training but also included IRR assessments and a dry run at Thorn Park primary school in one LoI, Cinyanja. After the training, participants conducted an additional two-day dry run simultaneously in each of the five target provinces. The dry runs enabled participants to further practice using the instruments and protocols with real respondents and in the respective LoI. The data from the dry runs informed final instrument revisions, including reprogramming of the survey forms on the tablets to ensure ease of use.

[14] Education Data activity, based on this baseline, updated the EGRA Toolkit that was originally adapted for Zambia in 2016. The baseline tools as well as the lessons learned from the 2018 Baseline EGRA are included in the updated toolkit.

[15] There is no local institution in Zambia with an Ethical Review Committee for granting IRB approvals for social science studies (see: https://www.hhs.gov/ohrp/sites/default/files/2019-International-Compilation-of-Human-Research-Standards.pdf). Researchers that collaborate with MoGE to conduct education studies are only required to get approval from the Permanent Secretary, and the Education Data activity secured it for the baseline.

EDUCATION DATA ACTIVITY INDICATOR 1.3 RESULT: Based on ranking per the gold standard scores above 90 percent at training, the Education Data activity selected 56 QCOs and 112 assessors for baseline data collection.

During the training and dry runs, the Education Data activity closely monitored participants' performance to identify persistent challenges in order to provide feedback and conduct gap training. A skilled EGRA assessor scores the assessment, and those results become the gold standard. The degree of agreement between trainees' ratings on EGRA subtasks and that of the gold standard is then used to measure assessor accuracy. According to the EGRA Toolkit 2.0, 90 percent is set as the gold standard benchmark score for assessors to collect data (RTI International 2016). In accordance with the gold standard, 149 trainees (58 QCOs and 91 assessors) or 84 percent scored around 95 percent, and none scored less than 85 percent. Trainees who scored less than 90 percent were gap trained on areas where they scored less than the gold standard.

For additional information on the methodology used for instrument adaptation, pilot testing, and recruiting QCOs and assessors, see Annex 10.

DATA COLLECTION

Data collection took place toward the end of the 2018 school year, from October 31 to December 5, for about five weeks. This enabled measuring early grade reading skills based on knowledge gained by Grade 2 learners in a full academic year. The 56 well-trained data collection teams, with each team consisting of two assessors and a QCO, gathered data. Generally, each team was assigned one district, although a few teams were assigned more when districts were small and adjacent to each other. On average, each team assessed 14.5 schools with a range between 11 and 22 schools.

DATA QUALITY ASSURANCE

Although 48 percent of QCOs and assessors reported prior experience in conducting EGRAs and all scored above the gold standard during training, in order to ensure reliability and consistency in scoring among all the assessors, the Education Data activity conducted Inter Rater Reliability (IRR) tests during data collection.

At each school, two assessors assessed two to four learners independently at the same time. Results were analyzed using Cohen's kappa (κ) coefficient to measure the IRR or the degree of similarity in their ratings. A κ of 0 indicates that there is no agreement between raters outside of random chance, while 1 indicates perfect agreement between raters. Interpreting the meaning of κ follows the guidelines of $0.0 < \kappa \leq 0.2$ as slight agreement, $0.2 < \kappa \leq 0.4$ as fair agreement, $0.4 < \kappa \leq 0.6$ as moderate agreement, $0.6 < \kappa \leq 0.8$ as substantial agreement, and $0.8 < \kappa \leq 1$ as almost perfect agreement (Landis and Koch 1977; RTI International 2016). A total of 2,287 IRRs (15 percent of total assessments) were conducted at baseline. Results shown in Table 6 demonstrate that the IRR was greater than 0.8 for each of the seven languages. Near-perfect agreement between the assessors was achieved for all languages, indicating very high data reliability. In fact, two thirds of

TABLE 6 INTER-RATER RELIABILITY RESULTS (KAPPA COEFFICIENT)

LANGUAGE	IRR
All	0.94
Chitonga	0.91
Cinyanja	0.94
Icibemba	0.90
Kiikaonde	0.92
Lunda	0.91
Luvale	0.96
Silozi	0.92

the 112 assessors consistently scored above 95 percent throughout the data collection period.

All teams used electronic tablets preloaded with all the EGRA and SSME tools. Internal quality checks programmed into the tablets for each tool ensured that many questions could only be answered with reasonable responses. For example, restrictions for learner age ensured that assessors could not record unreasonable numbers such as 78 or 101 years. Skip logics also increased the reliability and accuracy of the recorded responses by ensuring that questions were only asked to respondents when deemed relevant based on their prior responses. The tablets were linked to a Myna dashboard to allow the data to be frequently uploaded to servers directly from each tablet. The Education Data activity team periodically downloaded this data to conduct data quality checks. Quick and periodic access to data enabled the team to identify and alert assessors to issues immediately and to instruct assessors on ways to remedy errors.

Quality assurance was also provided through the close monitoring of assessors in each team by QCOs who provided daily feedback sessions throughout data collection. A WhatsApp group was setup to maintain constant communication between field teams and Education Data activity staff for rapid troubleshooting when needed. In addition, staff from both the Education Data activity and USAID conducted periodic unannounced monitoring visits to ensure compliance with all data collection guidelines.

DATA ANALYSIS METHODS

In December 2018, the Education Data activity team validated the data prior to cleaning the database and preparing it for analysis. To ensure the accuracy and replicability of the findings, two analysts independently analyzed the baseline EGRA data. One analyst utilized SPSS software, while the other utilized STATA (version 15). The analysts then compared their findings to check for consistency and accuracy of results. The team used the following data analysis methods to prepare this report.

EGRA TOOL RELIABILITY ANALYSIS

Several psychometric analyses were conducted using data from the baseline to assess the reliability of the EGRA tool using Cronbach's alpha (α) statistics, which measure the internal reliability of the EGRA tool by indicating the degree to which the individual subtasks are measuring the same construct of reading skills.

Also, Pearson correlation coefficients (r) were used to examine how different subtasks and their underlying reading skills are related to each other. The r statistic helps to examine the degree to which scores in one subtask are associated with scores in another subtask. Higher correlation coefficients indicate that the various subtasks are in fact measuring related constructs—underlying reading skills. The strong correlations between subtasks indicate that the EGRA tools used are reliable.

SAMPLE WEIGHTS CONSTRUCTION

The baseline EGRA used a three-stage random sampling approach. The team randomly chose schools within each district while ensuring that both urban and rural schools and various school types were represented in the sample. The learners tested for the assessment were randomly selected from within the sampled schools. Since not every school and learner had an equal chance of selection, statistical procedures were needed to adjust for design effects. Therefore, analysts constructed appropriate weights based on the probability of selection for each location, school, and learner in the sample. Sampling weights

were constructed at the district level, school level, and learner level and used in the analysis in this report (See Annex 10 for details).

SAMPLE CHARACTERISTICS AND READING PERFORMANCE

The team calculated frequencies, averages, cross tabulations, and other descriptive statistics to discuss sample demographics and produce detailed summary statistics on learners' reading performance. Results are disaggregated by sex and school type wherever applicable.

PREDICTORS OF ORAL READING SKILLS

The subtask correlations reveal how the subtasks and their underlying reading skills are related to each other. In order to draw programmatic and policy-relevant conclusions and recommendations, the team examined factors associated with predicting oral reading fluency skills. Data gathered through SSME questionnaires provide independent factors to explain oral reading fluency scores. The analysts found a strong floor effect when using an Ordinary Least Squares (OLS) regression model because there were many zero oral reading fluency scores. However, it is not necessarily true that all zero scores are the same, meaning that learners who scored zero may have had differing levels of capability that the assessment tool (the EGRA) simply could not pick up. The Tobit model works to correct for this challenge by predicting the change in oral reading scores for learners whose scores fall above zero, weighting for the probability of scoring higher than zero. This reveals the isolated effects of various factors on predicted values of reading scores while controlling for other factors. Multiple Tobit regression models allow results to be examined even when there is clustering around the lower and/or upper score bounds (ceiling and floor effects). Analysts tested several variables from SSME data that are conceptually plausible to predict reading fluency. Only those factors that analysts found to be most consistently and robustly correlated with oral reading fluency, of expressed interest to USAID and Let's Read project, or control variables that helped ensure accuracy and precision of the estimates were selected and discussed in the report.

LIMITATIONS

COMPARABILITY ACROSS LANGUAGES

EGRAs administered in different languages generally use comparable test forms in that the EGRA forms themselves have the same measurement purpose, but there is no assumption of equivalence (i.e., identical item difficulty). Research indicates that the difference between languages may be primarily a matter of the rate at which the children achieve the first few steps toward reading acquisition (Seymour et al. 2003). Regardless of language, all children who learn to read progress from being non-readers (unable to read words) to initial readers (can read some items but not others) to advanced readers (can read all or most items). In languages with transparent orthographies (often called phonetically spelled languages), the progression through these levels is very rapid (i.e., just a few months of learning) relative to languages with more complex or deeper orthographies. Zambian languages are transparent, but they have different levels of orthographic transparency. Therefore, it is not easy to say when learners in language A are outperforming those in language B if language A has a far more transparent orthography than language B.

As discussed earlier, the stories used for comprehension subtasks and the numbers of words used to tell the stories at baseline varied by language because of inherent language differences. However, the differences should not affect comparison within a language over time (such as between baseline and midline

for a given language). But, comparisons between languages at each round (baseline or midline) should consider the inherent differences among languages. It is to be noted that the primary goal of this assessment is to ensure that each language has reliable and valid EGRA tools both at baseline and midline so that changes in learner performance can be tracked accurately within that language. The Education Data activity will ensure that the midline EGRA tools are equivalent to the baseline tools for each language to enable comparisons over time for each language. Also, the midline assessment will also include equating of the tools so that baseline and midline scores can be compared on the same scale across time.

COMPARABILITY ACROSS DISTRICTS AND SCHOOLS

The sample of 816 schools assessed in the 2018 Baseline EGRA is large enough that generalized overall conclusions can be drawn. However, since the sample was selected proportionately to the number of schools in each district and then by location and school type within each district, the number of sampled schools ranged from 7 to 43 in individual districts.[16] Due to these differences in sample size at the district level, comparisons based on statistical analysis between the districts cannot be made. In some schools there were fewer than 15 learners enrolled in Grade 2, and all who were present on the day of assessment were included. But, in other schools, there were more than 100 Grade 2 learners, and 20 learners were assessed. Because the sample size at the school level was not large enough in some schools relative to others, it is not possible to statistically compare school A to school B even using weighted scores. Therefore, while district-level results are shown in Annex 3, the results are illustrative for Zambian policymakers and not designed for direct comparisons at each round of baseline or midline between districts teaching in the same GRZ-designed LoIs.

TYPES OF EGRA SUPERVISORS OR ENUMERATORS

The study recognizes the value of involving GRZ personnel, especially from MoGE, in this process: it capitalizes on existing experience and expertise, especially of those individuals who were involved in previous EGRAs; it increases ownership of the study results; and it builds the capacity of GRZ staff. However, there is a potential risk in engaging the same actors in both oversight and assessment. Nevertheless, MoGE staff have been involved in data collection activities in the past and have conducted themselves in a professional and objective manner. Further, these data serve an important purpose for the MoGE, and as a result MoGE has a vested interest in obtaining accurate information from these assessments. Finally, to help avoid issues of potential bias, the Education Data activity made sure that no assessors were assigned to gather data in the regions in which they work. Therefore, there is reason to believe that the risk of MoGE enumerator bias is relatively low.

TIMING OF THE ASSESSMENT

The baseline EGRA took place between October and November 2018, which overlaps with the end-of-year national assessments. As a result, when evaluation teams arrived at some primary schools, the Grade 2 learners had been sent home in order to create classroom space for learners taking national exams. This led to some schools being replaced with schools similar to the originally sampled school. In other cases, the head teacher asked Grade 2 learners enrolled in the school to come on days of the EGRA

[16] The Kambompo district school sample size was seven, while the Zambezi district school sample size was 43.

assessment. The assessment teams adhered to the sampling procedure as closely as possible to ensure rigor, but some minimal bias could not be ruled out in choice of alternative schools and learners who attended school based on head teacher request. Also, bad terrain made some schools inaccessible and some community schools were permanently closed. Therefore, 72 schools that were originally sampled were replaced during the 2018 Baseline EGRA. To minimize bias, Education Data activity staff randomly chose all replacement schools.

RESPONSE BIAS

Response bias is a common issue with in-person questionnaires. This bias includes several types of false or adjusted responses, where respondents react to stimuli other than the question itself such as the environment, the presence of others nearby, etc. Among these is a bias that occurs when interviewees are inclined to choose their responses that they believe are more pleasing or acceptable to the interviewer. The risk of response bias was especially high for the learner questionnaire, as Grade 2 learners were asked to provide household-level information such as household assets/consumer durables, access to utilities at home, whether parents help them with homework, and so on. It is difficult to measure the extent of this bias without utilizing costly follow-up procedures. Fortunately, there is no reason to suspect that any response biases would not be uniform across respondents, so data should remain valid even if a bias were detected. The study took several precautions to reduce such biases by carefully training assessors on appropriate reactions to learner correct/incorrect answers and general attitudes when interviewing respondents.

COMPARISON WITH OTHER EGRAS

While both ECZ and the Education Data activity conducted EGRAs in 2018, comparability across the two assessments is limited because of differences in the sample and tools used. ECZ administered a nationwide EGRA with four subtasks (letter sounds, non-word reading, oral passage reading, and reading comprehension) that were also included in the Education Data activity baseline EGRA. Whereas the subtasks are the same, the actual passages used for testing fluency and comprehension are different. The EGRA conducted by ECZ also assessed Grade 3 learners during the first nine weeks of the 2018 school year.[17] In contrast, the Education Data activity baseline EGRA assessed Grade 2 learners at the end of the 2018 academic year.

Several EGRAs were also conducted in 2014. Under the Read to Succeed (RTS) Project, EGRA data from Grade 2 and 3 learners in 200 government schools in six provinces (Northern, Luapula, Muchinga, Eastern, North-Western, and Western) and four languages (Icibemba, Cinyanja, Kiikaonde, and Silozi) were collected. Under the USAID-funded Time to Learn (TTL) project, EGRA data from 102 community schools in six provinces (Lusaka, Central, Eastern, Copperbelt, Southern, and Muchinga) and three languages (Chinyanja, Icibemba, and Chitonga) were collected. ECZ also administered an EGRA in 2014 as part of its Grade 2 National Assessment Survey. The survey was administered in 486 schools and adapted for all seven Zambian national languages. While many of the subtasks overlap across these three assessments and the baseline EGRA conducted by the Education Data activity, the actual non-words, oral

[17] 2018 National Assessment Survey of Learning Achievement in Grade 2: Results for Early Grade Reading and Mathematics in Zambia. April 2018 (Document provided by ECZ).

reading passages, and comprehension questions used in each one differed. In addition, there are notable differences in the provinces and LoIs included in the samples. Therefore, comparisons across the various other EGRAs should be considered with caution because of differences in the sample and tools. However, patterns of differences in results for disaggregated groups such as learner sex, provinces, and so on, can be compared.

RESULTS: EGRA TOOL RELIABILITY

This section discusses results of psychometric analyses used to determine reliability of EGRA tools, the degree of agreement between assessors' ratings, and the relation between the reading skills assessed through various subtasks.

TABLE 7. EGRA TOOL RELIABILITY (CRONBACH'S ALPHA)

LANGUAGE	RELIABILITY
Chitonga	0.84
Cinyanja	0.84
Icibemba	0.86
Kiikaonde	0.82
Lunda	0.84
Luvale	0.87
Silozi	0.85

The team analyzed reliability characteristics of the Zambia EGRA tools using Cronbach's alpha (α) values based on the percent correct for all timed and untimed subtasks in an EGRA tool. Results are shown in Table 7. The α for each language's EGRA tool ranged from 0.82 for Kiikaonde to 0.87 for Luvale, which is considered strong. For educational tests, the α value of 0.70 is considered acceptable (American Educational Research Association, American Psychological Association, and National Council on Measurement in Education 2014; RTI International 2016).

The subtask correlations reveal how the subtasks and their underlying reading skills are related to each other. Learners acquire reading skills in stages, and performance in one subtask alone does not make a learner successful in reading. The EGRA tool is designed so that the subtasks build on one another and work together to reach the ultimate goal of achieving reading comprehension. Correlations between subtasks capture such associations. Correlations between subtasks are calculated using the Pearson correlation coefficient (r). The closer r approaches 1, the stronger the correlation, i.e. positive linear relationship, between the subtasks.[18]

Table 8 summarizes the strong and very strong subtask correlations for each language's EGRA. Five very strong correlations are consistent across all languages: non-word reading and syllable identification; oral reading and syllable identification; oral reading and non-word reading; reading comprehension and non-word reading; and reading comprehension and oral reading. There are very strong relationships between oral reading fluency and the initial reading skills of syllable identification and non-word reading for all languages, implying that an ability to correctly identify and pronounce syllables and decode words is predictive of reading fluency ability. Very strong relationships between reading comprehension and oral reading fluency and non-word reading for all languages suggests that an ability to decode and read a passage fluently are predictive of reading comprehension. These strong correlations between subtasks support the reliability of the EGRA tools used. Complete tables of subtask correlations for all languages and subtasks are in Annex 8.

[18] A guideline for interpreting the strength of the relationship suggests $0.00 < r < 0.19$ is a very weak positive relationship, $0.20 < r < 0.39$ is a weak positive relationship, $0.40 < r < 0.59$ is a moderate positive relationship, $0.60 < r < 0.79$ is a strong positive relationship, and $0.80 < r < 1.0$ is a very strong positive relationship (Evans 1996).

TABLE 8. EGRA TOOL RELIABILITY: SUMMARY OF SUBTASK CORRELATIONS

SUBTASK CORRELATION	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUVALE	SILOZI
Syllable identification (subtask 3)/ Letter Sound Identification (subtask 2)	S	S	S	S	<S	<S	S
Non-word Reading (subtask 4)/ Letter sound Identification (subtask 3)	S	<S	S	<S	<S	<S	<S
Non-word Reading (subtask 4)/ Syllable identification (subtask 2)	VS	VS	VS	VS	VS	VS	VS
Oral Reading (subtask 5)/ Letter Sound Identification (subtask 2)	S	<S	<S	<S	<S	<S	<S
Oral Reading (subtask 5) / Syllable identification (subtask 3)	VS	VS	VS	VS	VS	VS	VS
Oral Reading (subtask 5)/ Non-word Reading (subtask 4)	VS	VS	VS	VS	VS	VS	VS
Reading Comprehension (subtask 6) / Syllable identification (subtask 3)	S	VS	VS	S	VS	VS	S
Reading Comprehension (subtask 6) / Non-word Reading (subtask 4)	VS	VS	VS	VS	VS	VS	VS
Reading Comprehension (subtask 6) / Oral Reading (subtask 5)	VS	VS	VS	VS	VS	VS	VS
Eng. Listening Comprehension (subtask 1) / Eng. Vocabulary (subtask 7)	S	<S	<S	S	<S	<S	<S

Less than Strong <S Strong S Very Strong VS

RESULTS: LEARNER READING ASSESSMENT IN SEVEN LOCAL LANGUAGES

This section presents EGRA baseline results by each subtask as the percentage of learners scoring zero, average learner scores, and the percentage of learners achieving the Let's Read project targets, disaggregated by learner sex and school type. We discuss when the differences between the categories are statistically significant. Annex 1 presents full disaggregated results including by provinces. All results are from appropriately weighted data.

PRE-READING SKILL: LISTENING COMPREHENSION

Listening comprehension is a subtask used to assess pre-reading skills of early grade learners. In this subtask, learners are asked to respond to five questions with a word or simple statement after they hear a passage read aloud to them by an assessor.

ZERO SCORES IN LISTENING COMPREHENSION

Zero scores represent the percentage of learners who scored zero, i.e., did not answer a single question correctly. Overall, as shown in Table 9, 18 percent of the baseline learners scored zero in listening comprehension, which indicates that nearly one fifth of the learners did not understand what was read to them. While 21 percent of girls scored zero, 14 percent of boys scored zero, a statistically significant difference—indicating that girls performed poorly relative to boys. There were also variations by language. While 8 percent of learners in Luvale scored zero, nearly 25 percent scored zero in Cinyanja. Approximately 30 percent of learners in Cinyanja reported that they did not speak this LoI as the primary language at home. However, although 48 percent of learners tested in Kiikaonde reported not speaking Kiikaonde at home, fewer scored zero. Table 9 also displays the zero scores for listening comprehension in the seven LoIs and by learner sex. Significantly more girls in Chitonga, Cinyanja, and Luvale scored zero than boys, with the largest difference being between girls and boys assessed in Cinyanja.

TABLE 9. LISTENING COMPREHENSION ZERO SCORES, BY LANGUAGE AND SEX

ITEMS	ALL	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUAVALE	SILOZI
Overall	18%	9%	25%	13%	11%	10%	8%	18%
Girls	21%	11%	30%	16%	12%	11%	12%	20%
Boys	14%	7%	20%	11%	10%	9%	4%	17%
Significance	***	***	***	None	None	None	***	None

***, **, and *, respectively, represent significance at 1%, 5%, and 10% levels for difference by sex

AVERAGE SCORES IN LISTENING COMPREHENSION

Overall, results presented in Table 10 show that learners were able to answer on average 41 percent of questions correctly (2 comprehension questions). By learner sex, on average boys answered 43.7 percent correctly, and girls answered 38.5 percent correctly; this difference was statistically significant at 1 percent. By language, on average learners in Kiikaonde performed best and were able to answer 58 percent correctly (2.91 questions). Learners in Cinyanja scored the lowest, with an average of 34.5 percent (1.72

questions). Table 10 also displays the average scores for listening comprehension in the seven languages disaggregated by learner sex. The patterns mimic the overall results in that girls scored lower on average than boys in all languages; differences by sex were statistically significant for Chitonga, Cinyanja, and Luvale.

TABLE 10. LISTENING COMPREHENSION AVERAGE SCORES, BY LANGUAGE AND SEX

ITEMS	ALL	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUAVALE	SILOZI
Overall	41.0	47.2	34.5	40.3	58.2	47.1	44.9	42.3
Girls	38.5	44.8	30.8	39.8	56.8	42.1	41.3	41.0
Boys	43.7	49.7	38.2	40.8	59.9	52.2	48.7	43.6
Significance	***	***	***	None	None	None	***	None

***, **, and *, respectively, represent significance at 1%, 5%, and 10% levels for difference by sex

INITIAL READING SKILLS: LETTER SOUNDS, SYLLABLE SOUNDS, NON-WORD READING

In Zambia, beginning in Grade 1, learners are taught that letters represent individual sounds that when combined with other letters make up words, and that these words map onto different meanings. For example, as learners learn to blend the individual "c" – "a" – "t" sounds together to form the word "cat," they utilize their vocabulary skills to connect the word with the animal they know. As learners progress and practice manipulating different sound and syllable combinations, they begin to decode and then recognize simple words (Kim, Boyle, Zuilkowski & Nakamura 2016). Learners who are second language learners require additional instructional support to help map meaning onto the words they read. This is because they lack the requisite oral language and vocabulary skills in the LoI (Kim et al. 2016). To measure learners' mastery of these initial reading skills, the 2018 Baseline EGRA includes a letter sound identification, a syllable identification, and a non-word reading subtask.

Letter sound identification measures the basic reading skill of letter sound recognition. It assesses learners' ability to say the sounds of the letters of the alphabet accurately. Automaticity and fluency of letter sounds knowledge is a predictive skill for later reading success. For this subtask, assessors provide learners with a page of 100 randomly distributed upper- and lowercase letters and ask them to say the sounds of as many letters as possible within one minute. The subtask is scored by the number of letter sounds that a learner says correctly in one minute (correct letter sounds per minute—clspm) out of a total of 100 possible letters.

Syllable sound identification measures learners' ability to read syllables. For this subtask, assessors give learners a table of 100 randomly ordered common syllables and ask them to read as many syllables as possible within one minute. The test is scored according to the number of correct syllables read per minute (csspm).

The non-word reading subtask measures learners' ability to decipher "words" that do not actually exist. Non-word reading provides a pure measure of learners' decoding skills because it moves beyond reading familiar words based on sight recognition or memorization and measures learners' ability to decode each letter and syllable and produce a linguistically correct word that follows the grammatical structure of the language. During administration of this subtask, assessors show learners a table of 50 made-up words and

ask them to read as many words as possible in one minute. The non-word-reading subtask is timed and measured by the number of correct non-words read per minute (cnonwpm).

ZERO SCORES IN LETTER SOUND, SYLLABLE IDENTIFICATION, AND NON-WORD READING

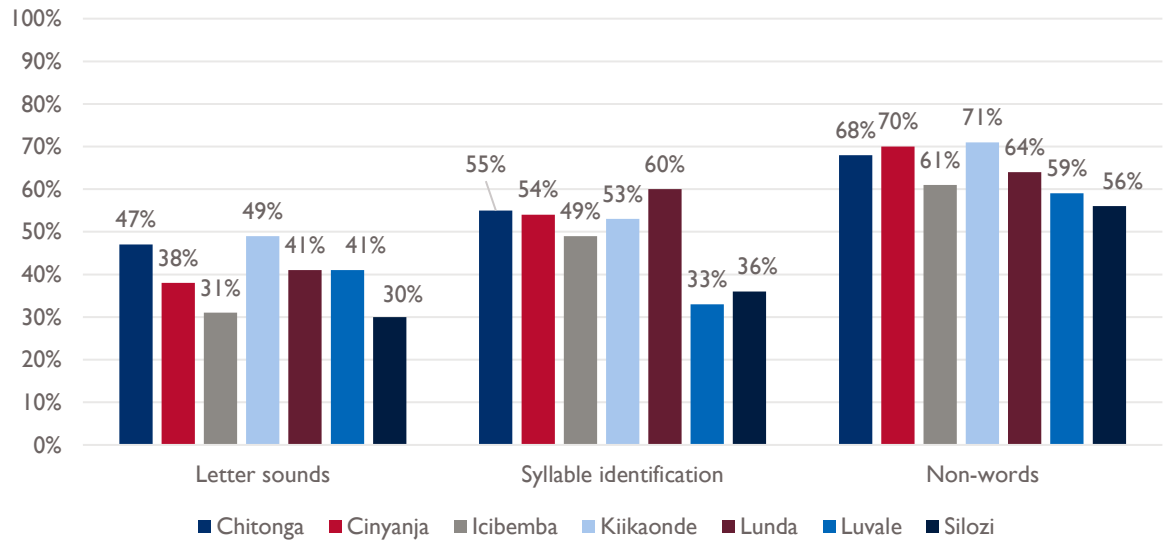
TABLE 11 shows zero score results for the three subtasks for the overall sample and by sex disaggregation. Figure 5 shows the zero scores for the three subtasks by languages.

TABLE 11. INITIAL READING SKILLS ZERO SCORES, OVERALL AND BY SEX (PERCENT OF LEARNERS SCORING ZERO)

SUBTASKS	OVERALL	GIRLS	BOYS	SIGNIFICANCE (DIFFERENCE BY SEX)
Letter sounds	39.09	39.16	39.08	None
Syllable identification	50.77	49.17	52.56	None
Non-words	66.22	65.69	66.70	**

***, **, and *, respectively, represent significance at 1%, 5%, and 10% levels.

FIGURE 5. ZERO SCORES FOR INITIAL READING SKILLS (LETTER SOUND IDENTIFICATION, SYLLABLE IDENTIFICATION, NON-WORDS) BY LANGUAGE



LETTER SOUND IDENTIFICATION Overall, 39.09 percent of learners could not identify a single letter sound correctly out of the possible 100 letters presented to them in the EGRA tool. There was no significant difference by learner sex. By language, zero scores were as high as 49 percent among learners in Kiikaonde and as low as 30 percent among learners in Silozi. Given that the syllable identification and non-word reading subtasks require learners to apply letter sounds to decode larger units, the high percentage of learners scoring zero on the letter sound subtasks translates into a high percentage of learners scoring zero on the subsequent subtasks, as discussed below.

SYLLABLE IDENTIFICATION Overall, 50.77 percent of learners scored zero on the syllable identification subtask. These learners could not correctly identify a single syllable out of the 100 possible

syllables in the tool. There was no significant difference by learner sex. Zero scores ranged from 33 percent of learners in Luvale to 60 percent of learners in Lunda.

NON-WORD READING Overall, 66.22 percent of all learners scored zero on the non-word reading subtask, that is, the majority of learners could not decode a single non-word of the 50 were presented to them. By learner sex, zero scores were higher for girls (66.70 percent) relative to boys (65.69 percent), and the difference was statistically significant at the 5 percent level. By language, zero scores ranged from a high of 71 percent of learners in Kiikaonde to a low of 56 percent of learners in Silozi.

Overall, among the initial reading subtasks, zero scores increased from letter sounds to syllable identification to non-word reading, except in Luvale. In Luvale, while 41 percent of learners scored zero on the letter sound identification subtask, only 33 percent did on the syllable identification subtask. This may reflect language characteristics of Luvale in that phonemes may more commonly map to syllables than to individual letters; as a result, learners could find it easier to decode common syllable combinations than the individual letter sounds. According to the National Literacy Framework (MoGE 2013), Luvale and Icibemba have a total of 52 letter sounds to be learned for someone to be able to read, while other languages have more letter sounds, ranging from 62 to 72. This gives more time to practice in Luvale and Icibemba, while, in other languages, new letter sounds are still being introduced. The quality of training received by teachers could also lead to such results, as teachers who are trained well are likely to expose learners to different instructional methods.

AVERAGE SCORES IN LETTER SOUND, SYLLABLE IDENTIFICATION, AND NON-WORD READING

Table 13 presents the average scores for the overall sample, by learner sex and by language for each of the three initial reading skills.

TABLE 12. AVERAGE SCORES FOR ALL INITIAL READING SKILLS

	LETTER SOUNDS (CLSPM)	SYLLABLE SOUNDS (CSSPM)	NON-WORD READING (CNONWPM)
Overall	6.82	10.18	4.29
Girls	6.53	9.55	4.09
Boys	7.08	10.77	4.50
Chitonga	6.41	8.67	3.88
Cinyanja	6.71	10.09	3.83
Icibemba	8.09	9.57	6.41
Kiikaonde	6.13	8.48	2.92
Lunda	5.61	7.42	4.68
Luvale	5.11	14.18	5.17
Silozi	7.54	13.99	5.37

LETTER SOUND IDENTIFICATION: Overall, learners on average could correctly identify 6.82 clspm, indicating that learners struggle to identify the correct sounds associated with each of the letters presented to them. In Zambia most teachers learn to read letter names (the alphabet) as learners, so it is difficult for them to master letter sounds, and they fail to distinguish sounds in a local language, for example, "a" and "e"; "l" and "e"; and "k" and "c". (Matafwali and Bus 2013). Also, teachers are sometimes posted to areas where they do not speak the designated LoI and thus find it difficult to teach reading (Folotiya 2014). As a result, learners may not be taught the correct letter sounds if teachers do not receive explicit training to ensure that they themselves know the letter sounds. By sex, girls scored less than boys, a statistically significant difference at the 5 percent level. By language, average scores ranged from a high of 8.09 clspm in Icibemba to a low of 5.11 clspm in Luvale.

SYLLABLE IDENTIFICATION: Overall, the average score was 10.18 csspm. Although girls scored less than the boys, the difference was not statistically significant. By language, learners in Luvale and Silozi scored on average highest (14.18 csspm and 13.99 csspm, respectively), while learners in Lunda performed the lowest, with an average of 7.42 csspm. These results indicate that learners are recognizing and pronouncing a limited number of syllables. But, average scores in the syllable identification subtasks were higher than the average scores in the letter sound identification subtask. In addition to most teachers do not learn to read letter names or some are posted to areas where they do not speak the designated LoI, the Zambian languages are syllabic in nature, and, as a result, learners find it easier to read syllables (combinations of one or more consonants and a vowel such as *ba, be, bi, bo, bu*) rather than individual letters such as *b, k, and c* on their own.

NON-WORD READING: On average, learners could read 4.29 cnonwpm of the 50 words that were presented to them. By sex, girls scored less than boys, but this difference was not statistically significant. Learners in Icibemba scored the highest, with an average of 6.41 cnonpm, while learners in Kiikaonde scored the lowest at 2.92 cnonpm. Given that learners are not familiar with most of the non-words, performance in this subtask relies solely on the learners' ability to apply letter sounds to decode the non-words.

FLUENCY CONFIRMATION: ORAL READING FLUENCY AND READING COMPREHENSION

The oral reading fluency subtask measures learners' ability to read a passage quickly and accurately. Learners are asked to read as much of a passage as they can within a minute. As discussed earlier, depending on the language, the passage contained between 43 and 57 words. After one minute, the assessor records the number of words read correctly (cwpm).

The reading comprehension score reflects the percentage of questions answered correctly out of the total possible (five). After the learner reads the passage to assess oral reading fluency, the assessor asks the learner to answer comprehension questions about the story. The number of questions asked depends on the point at which the learner has stopped reading after one minute. If the learner has only read half of the passage, he or she is only asked two or three questions; if the learner has not read even one word, no questions are asked; and, if the learner has completed the passage within one minute, the assessor asks all five questions. The test is scored according to the number of correct questions answered (percent correct).

ZERO SCORES IN ORAL READING FLUENCY

Overall, as shown in Table 13, about 64.07 percent of learners scored zero on the oral reading fluency subtask, which indicates that the majority of learners are non-readers. They were unable to read a single word from the passage that was given to them. By learner sex, zero scores were lower for girls (63.47 percent) relative to boys (64.83 percent), a statistically significant difference at the 10 percent level. By languages, zero scores ranged from a high of 75.03 percent of learners in Kiikaonde to a low of 53.15 percent of learners in Silozi.

TABLE 13. ORAL READING FLUENCY ZERO SCORES, OVERALL AND BY LANGUAGE AND SEX (PERCENT OF LEARNERS)

ITEMS	ALL	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUAVALE	SILOZI
Overall	64.07%	73.62%	61.15%	62.63%	75.03%	64.45%	55.89%	53.15%
Girls	63.47%	71.85%	61.85%	60.86%	77.99%	68.81%	57.26%	49.84%
Boys	64.83%	75.45%	60.78%	64.50%	71.73%	59.94%	54.45%	56.55%
Significance	*	None	***	None	*	***	None	*

***, **, and *, respectively, represent significance at 1%, 5%, and 10% levels for difference by sex

Given the performance on the previous subtasks, these zero scores are not surprising. Evidence suggests that teachers' initial phonics instruction should focus on easy-to-decode single syllable words that learners would be familiar with, and then, as they are able to decode simple words with increasing accuracy, teachers can begin to support them to develop fluency (Kim et al. 2016). As shown earlier, most learners still lack foundational letter sound knowledge, though they may recognize and as a result recall some familiar sight words in the oral reading passages. Also, most of the learners assessed at baseline are still unable to decode a word as indicated by the non-word reading results.

ZERO SCORES IN READING COMPREHENSION

Overall, as shown in Table 14, about 71.92 percent of all learners could not answer one comprehension question correctly, either because they did not read far enough to be asked questions or because they did not comprehend what they read. Given that oral reading fluency is a strong predictor of reading comprehension, these results are consistent with what is to be expected, as overall, 64 percent of learners could not decode a single word in the oral reading fluency subtask. By learner sex, zero scores were lower for girls (70.97 percent) relative to boys (72.83 percent), although this difference was not statistically significant. By languages, zero scores ranged from a high of 81.56 percent of learners in Kiikaonde to a low of 50.47 percent of learners in Silozi. This is consistent with the fact that there was a higher percentage of learners in Kiikaonde who scored zero on the oral reading subtask, and a lower percentage among learners assessed in Silozi.

TABLE 14. READING COMPREHENSION ZERO SCORES, OVERALL AND BY LANGUAGE AND SEX (PERCENT OF LEARNERS)

ITEMS	ALL	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUAVALE	SILOZI
Overall	71.92%	76.67%	75.50%	72.88%	81.56%	72.72%	67.94%	50.47%
Girls	70.97%	74.59%	76.79%	69.93%	82.67%	77.83%	67.60%	45.21%
Boys	72.83%	78.85%	74.02%	76.00%	80.26%	67.43%	68.34%	55.90%
Significance	None	None	***	None	None	***	None	***

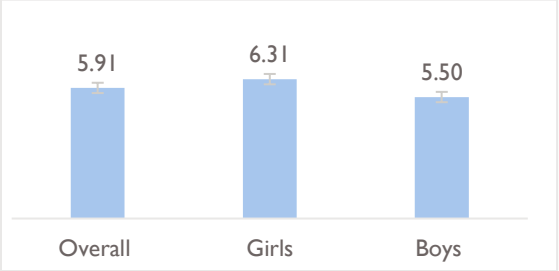
***, **, and *, respectively, represent significance at 1%, 5%, and 10% levels for difference by sex

If learners are applying individual letter sounds to decode each word, they will not have the attention or working memory needed to be able to extract meaning from what they are reading (Kim et al. 2016). As such, evidence suggests that for learners to comprehend what they read, they must be able to read with some degree of fluency. In addition, reading comprehension depends on learners' oral language and vocabulary skills (Kim et al. 2016). A larger share of learners assessed in Kiikaonde (48.1 percent) reported that they speak a different language at home than the LoI used at school. This suggests that these learners may be learning to read in a second or additional language, and, as such, teachers may need to spend additional instruction time to develop learners' oral language and vocabulary skills to support their reading comprehension.

AVERAGE SCORES IN ORAL READING FLUENCY

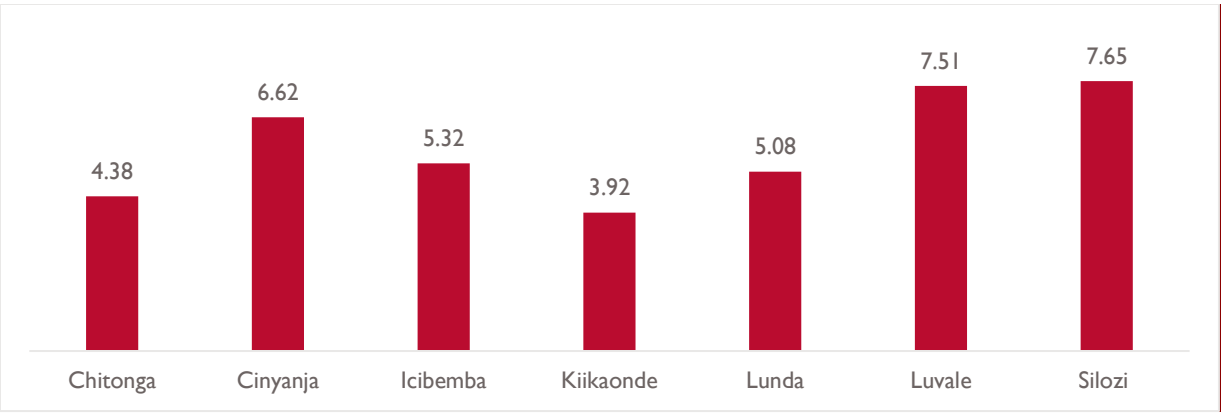
Overall, as shown in Figure 6, the average score for oral reading fluency was 5.91 cwpm, indicating that learners are reading the passages, which contain between 43 and 57 words depending on the language, with limited speed and accuracy. By sex, girls scored significantly higher than boys: average scores for girls was 6.31 cwpm relative to 5.50 cwpm for boys.

FIGURE 6. AVERAGE SCORES FOR ORAL READING FLUENCY (CWPM) OVERALL AND BY SEX



As shown in Figure 7, there were slight variances in oral reading performance by language. Similar to the results of previous subtasks, learners in Kiikaonde tended to have the lowest average scores, at 3.02 cwpm, while learners in Silozi had the highest, at 7.65 cwpm.

FIGURE 7. AVERAGE ORAL READING FLUENCY SCORES (CWPM) BY LANGUAGE



AVERAGE SCORES IN READING COMPREHENSION

To assess learners' ability to extract meaning from the oral reading passage, the assessor asked each learner up to five reading comprehension questions. Since how much of the passage the learners read in the oral reading fluency subtask determines how many comprehension questions they are asked, the average score includes correct, incorrect, and was not asked responses. Questions can be literal, whereby the learner has to recall simple who, what, and when facts from the passage, or they can be inferential. Inferential questions require learners to use their own prior knowledge of the world and clues from the story to answer the question.

Overall, on average, learners answered 10 percent (half a question) of the five reading comprehension questions correctly. This indicates that the learners understand very little of what they read and also that many are not able to read enough to be able to extract meaning. By sex, both boys and girls answered only about half a question correctly. Although girls scored on average 11.30 percent correctly while boys scored 9.94 percent correctly, this difference was not statistically significant. Uniformly, across all languages, learners could not on average answer even one comprehension question correctly. Learners in Silozi performed best, with an average of 0.78 questions answered correctly, while learners assessed in Chitonga, Cinyanja, and Kiikaonde all on average answered less than one half of a question correctly (0.47, 0.47, and 0.42, respectively).

RESULTS: LEARNER READING PERFORMANCE IN ENGLISH

In the National Guide for language of instruction practice, the MoGE mandates that one of the seven GRZ-designated LoIs be used as the primary LoI for Grades 1 to 4 in all primary schools nationwide. In addition, English is taught beginning in Grade 2 as an additional subject (UNICEF 2016b). To assess learners' oral language and vocabulary skills in English, the 2018 Baseline EGRA includes both a listening comprehension and an English vocabulary subtask. Similar to the listening comprehension subtask in the LoI, for the English listening comprehension subtask, learners listen to an assessor read a short passage to them and then they are asked to respond to five comprehension questions. For the English vocabulary subtask, learners are asked to identify body parts, classroom objects, and spatial relationships indicated by the assessor (for example, behind, in front, over, and under). In the 2018 Baseline EGRA, learners were asked to identify 20 English vocabulary words.

ENGLISH VOCABULARY: Overall, only 0.29 percent of learners scored zero on the English vocabulary subtask, which indicates that almost all learners have had some exposure to English vocabulary, either formally in school or informally outside of school. On average, overall the learners scored 39.49 percent on the English vocabulary subtask. On average, learners who attend government-run primary schools performed statistically significantly better (39.70 percent) in comparison to learners in community-run schools (15.50 percent), at the 1 percent significance level.

ENGLISH LISTENING COMPREHENSION: Overall, there was a higher percentage of learners scoring zero in English (45.97 percent) than in the LoI (17.66 percent). This may be explained by the fact that English is introduced as a subject starting in Grade 2, so learners will have had less than one year of formal instruction in the language. In addition, less than 1 percent of learners reported that they also spoke English at home. More girls scored zero than boys (46.14 versus 45.91 percent), though this difference was not statistically significant. By language, the results indicate that learners' abilities in English varied quite a bit from one language to another. A range of 24 percent to 59 percent of learners, depending on their LoI, scored zero in the English listening comprehension subtask. Learners in Kiikaonde had the lowest share of learners scoring zero on the English listening comprehension subtask, at 24 percent. Recall that in several of the other subtasks discussed above, a higher proportion of learners assessed in Kiikaonde had zero scores in comparison to all the other languages. At the same time, only one percent of Kiikoande learners reported that English was the language most frequently spoken at home, and 99 percent of teachers reported that Kiikaonde was the language that they most often used in the classrooms. Further research is needed to understand the stronger performance among Kiikaonde learners in the English vocabulary and English listening comprehension subtasks.

Overall, on average, Grade 2 learners answered less than one comprehension question correctly out of the five asked. Learners on average answered 17.05 percent of the 5 questions correctly, which is substantially lower than the average score on the LoI reading comprehension subtask. This indicates that Grade 2 learners perform better in listening comprehension in their LoI than in English. Learners of both sexes scored similarly. By language, learners scored a range of 12.8 percent in Icibemba to 29.98 percent in Kiikaonde on the English listening comprehension subtask, reflecting the lower Kiikaonde zero score.

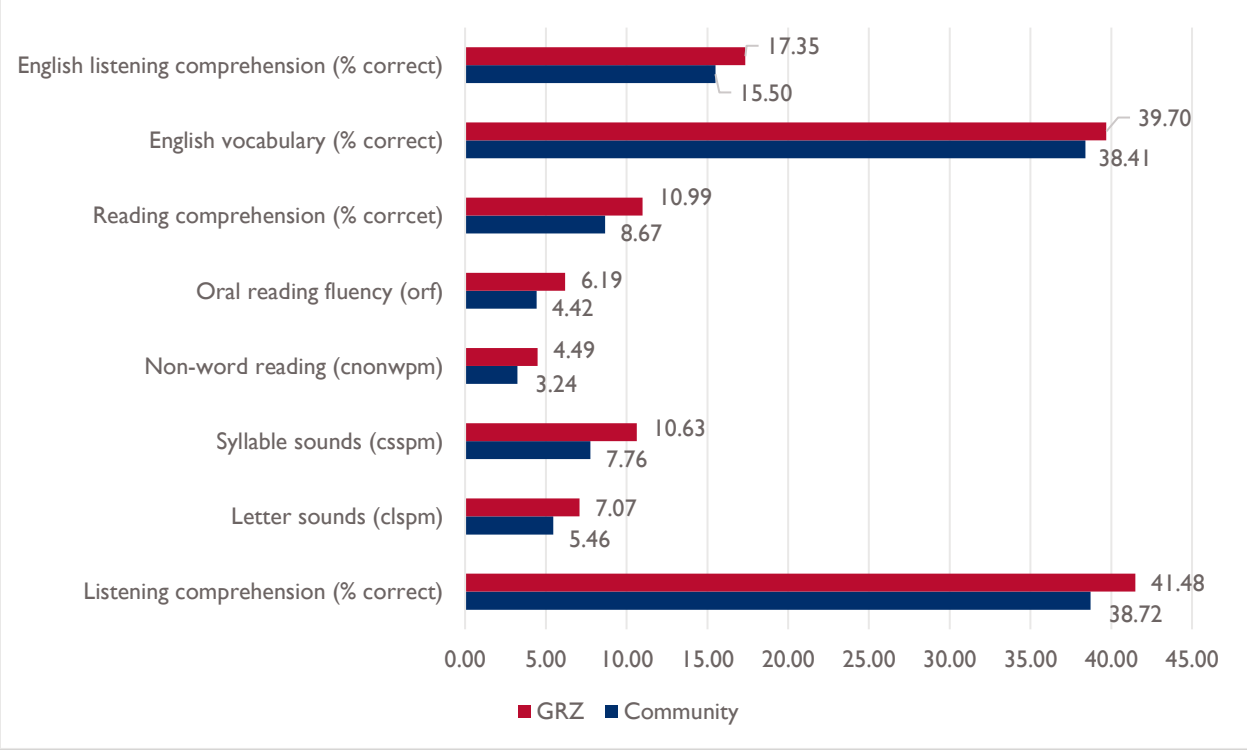
RESULTS: LEARNER READING PERFORMANCE BY SCHOOL TYPE AND ECE ATTENDANCE

SCHOOL TYPE

In Zambia, primary schools can be classified into two primary types. First, government-run primary schools, which make up 63 percent of all schools nationwide, are run by district education offices within MoGE. Second, community-run schools, which make up 30 percent of all schools, are often free and run by parents or other community members (Frischkorn & Falconer-Stout 2016). In the baseline sample of 816 schools, 629 (77 percent) were Government of the Republic of Zambia (GRZ)-run primary schools and 187 (33 percent) were community-run schools.

There was a higher percentage of zero scores for all subtasks among learners who attend community schools in comparison to GRZ-run primary schools. Figure 8 shows the average scores of learners who attend GRZ-run primary schools in comparison to learners who attend community schools for all subtasks. On average, baseline learners from GRZ-run primary schools had greater mean scores than learners in community schools (significant at the 1 percent level). For example, learners from GRZ-run primary schools on average were able to correctly identify 2.86 more syllables per minute than learners from community schools.

FIGURE 8. AVERAGE MEAN SCORES FOR GRZ AND COMMUNITY SCHOOLS

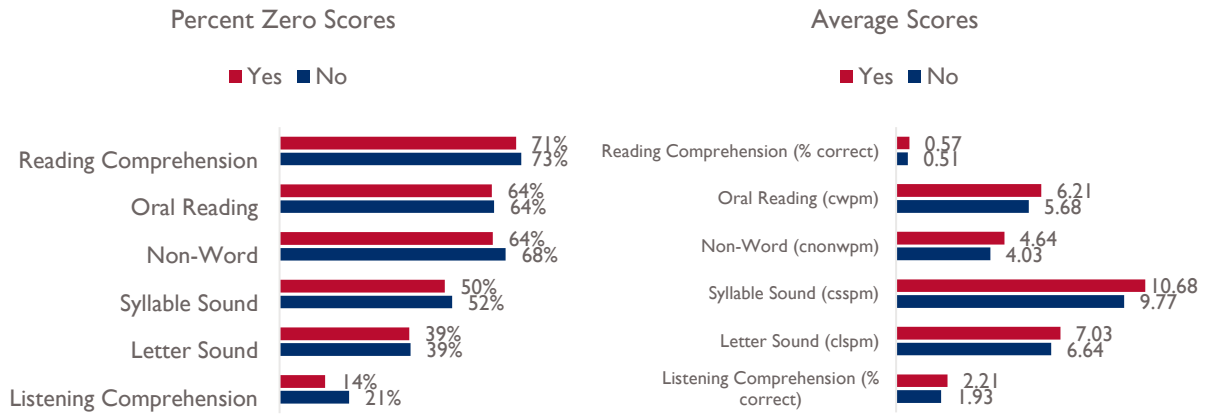


LEARNERS ATTENDANCE IN ECE

In 2012, the MoGE introduced the annexing of some government-run and community ECE centers for learners who are five to six years old. While enrollment in ECE in Zambia has increased from 15.3 percent

in 2004 to 27 percent in 2016, most learners in Zambia still appear to lack access to ECE (MoGE 2016). In the sample of 816 schools, 328 schools (41 percent) had an active Early Childhood Education (ECE) program, as confirmed through head teacher questionnaire. Among the 629 GRZ run schools sampled for the baseline, 283 schools had ECE program while it was 45 schools with ECE among the 187 community schools sampled for the baseline. Baseline data from learner questionnaires show that 44.63 percent of the learners attended ECE, either in the school in which they are currently enrolled or elsewhere in Zambia.

FIGURE 9. PERCENT ZERO SCORES AND AVERAGE SCORES BY ECE ATTENDANCE



As shown in Figure 2, in all subtasks, the share of learners with zero scores was lower among those who attended ECE than among those who did not. Reflecting these lower zero scores, average scores for all subtasks were higher for those who attended ECE than for those who did not. However, the differences were all not statistically significant except for listening comprehension, a pre-reading skill that develops from infancy until the pre-primary stage, perhaps owing to the newness of an ECE curriculum in Zambia. Evidence from other developing countries (Weatherholt et al., 2018; Cambridge Education, 2017) shows that strengthening the ECE curriculum and ensuring that it is implemented can help learners develop other pre-reading skills such as letter sounds that could help them transition better to Grade 1, where they could learn to decode in order to attain reading fluency by Grade 2.

RESULTS: MEETING THE MOGE NATIONAL BENCHMARKS

In 2014, MoGE set the minimum benchmarks for Grade 2, as shown in Table 15, that apply uniformly across all languages. Let's Read project, under its Objective 2: Meet the Metrics requires that 40 percent of emergent readers attain the MoGE stipulated proficiency levels in all non-word reading, oral reading fluency, and reading comprehension subtasks by 2020.

TABLE 15. PERCENT LEARNERS MEETING THE MOGE BENCHMARKS

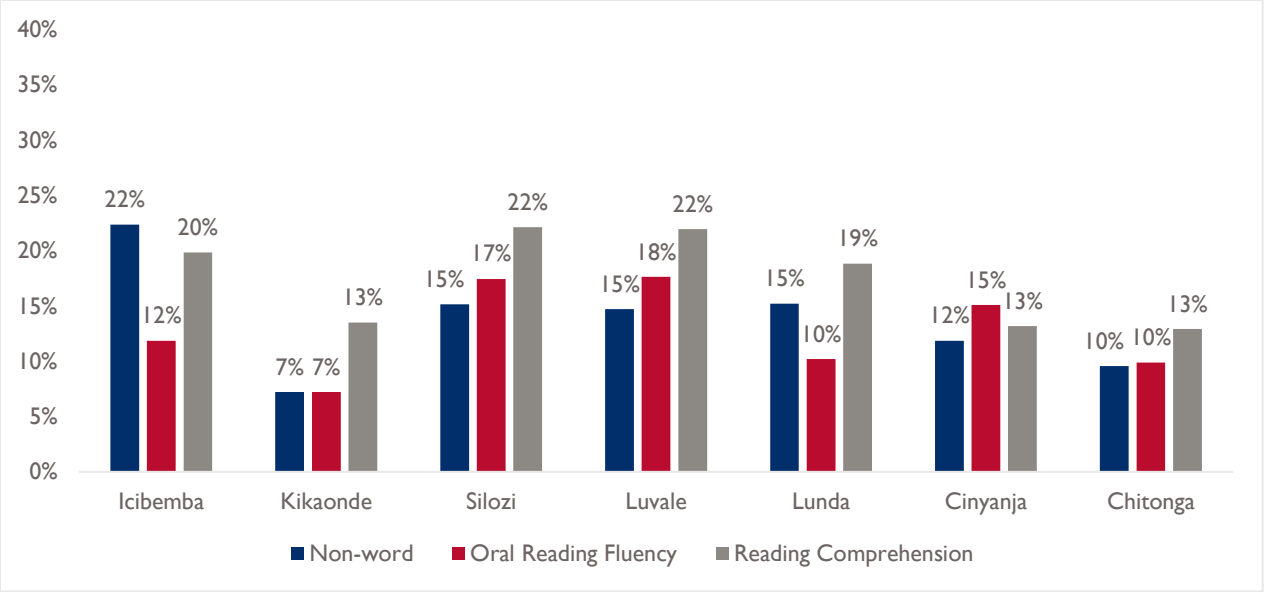
PERCENT OF LEARNERS AT BASELINE MEETING MOGE BENCHMARKS

SUBTASK	MOGE BENCHMARK	ALL	BOYS	GIRLS	COMMUNITY SCHOOLS	GRZ SCHOOLS	LEARNER ATTEND ECE	LEARNER NOT ATTEND ECE
Non-word reading	15 correct non-words per minute (cnwpm)	12.54	11.39	13.68	8.12	13.37	13.69	11.68
Oral reading fluency	20 correct words per minute (cwpm)	13.32	11.70	14.92	10.13	13.92	14.31	12.59
Reading comprehension	40 percent correct (2 questions answered correctly)	15.27	14.45	16.09	13.63	25.57	16.24	14.54

Overall, less than 16 percent of learners met MoGE benchmarks at baseline in any of the three subtasks, as shown in Table 15. Slightly more girls met the benchmarks in all the three subtasks in comparison to boys, although the differences were not statistically significant. More learners in GRZ-run primary schools met the benchmarks relative to learners in community-run schools in all subtasks; these differences were statistically significant at the 1 percent level. Learners who reported that they attended ECE programs were more likely to meet the benchmarks for each of the three subtasks than those who did not.

Figure 9 below shows the percentage of learners meeting the MoGE benchmarks by language. In Icibemba, 22 percent achieved the non-word benchmark, and 20 percent met the reading comprehension benchmark. But, only 7 percent of learners assessed in Kiikaonde and 10 percent of learners in Chitonga met the benchmarks for both the non-word reading and oral reading fluency subtasks. While it may seem logical to make comparisons between these results, differences in the inherent language characteristics may explain these trends. For example, Kiikaonde could have a relatively less transparent orthography versus other languages, and, as a result, it would be more difficult for learners to master all the different sounds each letter and syllable can make. Consultation with local language experts can help shed light on whether there are significant differences in language characteristics in the seven LoIs in Zambia. Further research is also needed to examine whether these nuanced differences may be relevant for learners' performance, as well as for instructional methods.

FIGURE 9. PERCENT OF LEARNERS MEETING MOGE BENCHMARKS, BY LANGUAGE



About 10.2 percent of learners demonstrate reading fluency and comprehension of grade level text at the end of Grade 2. Education Service Indicator 1.1 for Zambia, using MoGE benchmarks measures percent of learners who meet an oral reading fluency score of 20 correct words per minute and answers at least 40 percent of comprehension questions correctly. Overall, as per ES 1.1, a total of 10.2 percent of Grade 2 learners demonstrated both reading fluency and comprehension of grade level text. Of this total, 11.84 percent of girls and 8.52 percent of boys demonstrated grade level fluency and comprehension.

USAID STANDARD INDICATOR ES 1-1 RESULT: Percent of learners who demonstrate reading fluency and comprehension of grade level text at the end of Grade 2 with USG assistance: 10.2 percent (8.52 percent boys; 11.84 percent girls).

About a quarter of the Let's Read Project's 2020 target has been met at baseline. The Let's Read project, under its Objective 2: Meet the Metrics requires that 40 percent of emergent readers attain the MoGE stipulated proficiency levels in non-word reading, oral reading fluency, and reading comprehension subtasks by 2020. At baseline, 8.10 percent of learners met the minimum proficiency levels for all three subtasks combined. This shows that about a quarter of the Let's Read project's 2020 target of 40 percent is met at baseline.

RESULTS: FACTORS ASSOCIATED WITH ORAL READING FLUENCY

In order to draw programmatic and policy relevant conclusions and recommendations, the Education Data activity team examined 29 plausible factors drawn from the SSME questionnaires to measure the extent that they may predict oral reading fluency scores, using Tobit regression models for the analysis. Most of the independent variables were recorded as binary variables (yes or no responses). The SSME factors considered in the regressions were:

LEARNER-RELATED FACTORS

- Age of the learner
- Learner was absent last week
- Learner read books at school today
- Learner brought home books
- Learner speaks LoI at home
- Learner has electricity at home
- Learner has other reading materials at home
- Learner reads at home,
- Others read to learner at home
- Learner has help at home with homework
- Learner attended ECE before Grade 1

TEACHER-RELATED FACTORS

- Learner's teacher at school today
- Teacher does nothing when learner does well
- Teacher praises learner when learner does well
- Teacher reminds learner to use finger when reading
- Teacher brings in pictures to teach new words
- Teacher tells learners new letter names or sounds
- Teacher asks learners to write new letters
- Teacher asks if letter is in learner's name
- Teacher tells learners to use finger space
- Teacher tells learners to look at all letters
- Homework assigned last week
- Teacher uses LoI most often for instruction

SCHOOL ENVIRONMENT

- School has a feeding program
- School has appropriate number of textbooks
- School has functional toilets
- School has functional toilets for girls
- School has electricity
- School has a library

In Table 16, the average marginal effect for each factor/independent variable is shown for the overall sample assessed at baseline. On average, a change in a factor, that is, a change from one binary category

to another (yes to a no) or a unit such as age (7 to 8 years old) is associated with a change in oral reading fluency scores in correct words per minute.

TABLE 16. PREDICTORS OF ORAL READING FLUENCY (TOBIT ESTIMATES)

Dependent Variable: Oral Reading Fluency (cwpm)	ALL (N = 14,391)		BOYS (N = 7,054)		GIRLS (N = 7,337)	
INDEPENDENT VARIABLES	MARGINAL COEFFI-CIENT	SIGNIFI-CANCE	MARGINAL COEFFI-CIENT	SIGNIFI-CANCE	MARGINAL COEFFI-CIENT	SIGNIFI-CANCE
Boy	-1.908	**	n/a	n/a	n/a	n/a
Learner Age	2.836	None	3.537	None	4.618	None
Learner Age Square	-0.082	None	-0.078	None	-0.223	None
Learner ate breakfast today	-1.086	None	-0.549	None	-1.266	None
Learner gets family help with homework	2.245	**	1.969	None	2.539	**
Family reads to learner at home	6.589	***	6.756	***	6.511	***
Learner reads books at school today	13.585	***	12.109	***	14.478	***
Teacher praises learner when they do well	2.870	***	3.764	***	2.001	None
Teacher tells letters name and sounds	3.288	**	2.097	None	4.512	**
Teacher uses LoI often in class	2.715	None	-1.610	None	5.972	None
Presence of School Library	7.243	***	7.710	***	6.594	***
Learner Attended ECE	-1.213	None	-3.003	**	0.249	None

***, **, and *, respectively, represent significance at 1%, 5%, and 10% levels

As Table 16 shows, overall factors including learner reading books at school today, learner getting help at home with homework, learner being read to at home, teacher praises learner when learner does well, teacher says letter name and sound, and school having a library positively predict oral reading fluency scores in a statistically significant way. The only negative factor that predicted reading fluency scores in a statistically significant way was learner sex, as boys scored significantly lower than girls. Results disaggregated by sex reflect similar patterns, with the only exception found among boys who attended ECE programs, in that, on average, boys who reported that they attended an ECE program scored 3 cwpm less relative to boys who did not attend an ECE program.

LEARNER READING PRACTICES AT SCHOOL AND AT HOME

Oral reading fluency scores tend to improve by 13.584 cwpm when learners practice reading at school relative to those do not and by 6.589 cwpm when someone at home reads at home than otherwise. Baseline data gathered through learner questionnaires showed that 60.22 percent of learners read at home, and 64.15 percent of learners have someone at home read to them. But only 35.7 percent of learners reported reading at school on the day of the assessment, and 25.06 percent of learners brought books home from school. Schools have lacked enough local language or English readers. Only 18.96 percent of head teachers reported that there is an adequate number of readers or textbooks at school, at a ratio of three pupils to one textbook. Furthermore, 58.75 percent of learners reported that there are no other reading materials available at home for them to read. The scarcity of books and reading materials at school and at home highlights the limited opportunities that learners in Zambia have to adequately practice reading. Learners acquire reading fluency through practice reading, although the most effective types of practice are still a matter of research (National Institute of Child Health and Human Development 2000). But, access to textbooks is shown to improve learners' learning outcomes. In addition, limited opportunities to read undermine the ability of learners to read fluently and understand information that is read. Supplementary reading materials, whether reading materials at home or books brought home from school are crucial for children to obtain enough practice reading (Abadzi 2006). Lack of books at school and at home could likely hinder learners' ability to develop their reading skills.

TEACHING PRACTICES TO TEACH READING

Overall, baseline results show that on average when the teacher praises learners when they do well in class, scores improve by 2.17 cwpm than otherwise, and by 3.14 cwpm when the teacher says letter names and sounds than not. Overall, about 84.50 percent of learners reported that their teacher says letter names and sounds while teaching, and 73.06 percent of learners said that their teacher praises them when they do well in class. Also, more than 80 percent of learners said that their teacher uses many evidenced-based practices in teaching reading such as telling learners to look at all letters, asking learners to write new letters, reminding learners to use finger spacing while reading, and bringing objects and pictures to teach new words. But, one third (32.2 percent) of learners said that their teacher does not ask learners if a new letter is in a name, indicating that teaching practices to teach reading still need to be improved.

Data from teacher surveys show that 55 percent of teachers did not receive in-service training for EGR in the last year, although all those who received the training found the training useful or very useful. In addition, about 74 percent of teachers had not received a coaching visit from a district education official in the last year, but among the teachers who had received at least one visit, almost all of the them rate the visit(s) as very useful or useful. Teachers value the training and coaching to improve their ability to teach reading to early primary learners, but a majority have not had the opportunity to receive the required training or coaching visits.

Most early grade reading related interventions are defined by their in-service training that instructs teachers how to teach reading, but they typically include coaching visits to reinforce training and improve reading instruction, teacher guides (i.e. usually scripted lessons), reading and learning materials, and tools and materials for learner assessment (Graham and Kelly 2018). In addition, research from Kenya demonstrates that an EGR intervention that offered in-service training on reading, coaching visits, textbooks for each learner, and scripted lesson plans was the most effective intervention for reading in

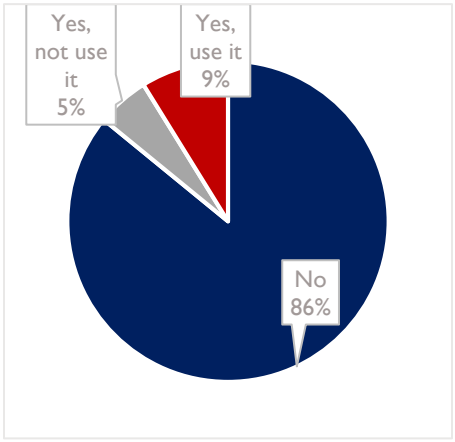
English and Kiswahili. That mix of activities was more effective than training and coaching as well as training, coaching, and textbooks for each learner (Piper et al. 2018).

SCHOOL RESOURCES

Overall, having a school library was found to significantly increase oral reading fluency scores of learners by 7.14 cwpm relative to learner scores in schools without a library. But, 86 percent of schools did not have a library, and in 5 percent of the schools, learners did not use the library even if it was present. Whereas 16.66 percent of government-run primary schools had a library, only half that percentage (8.11 percent) of community schools had libraries. While only 12.49 percent of rural schools had a library, 32.66 percent of urban schools had a library. About 26.61 percent and 31.55 percent of schools, respectively, with Lol of Chitonga (Southern province) and Cinyanja (Eastern province) had a library, but in all other languages, only 3.14 to 9.2 percent of schools had a library.

When there was a library at school, 31.2 percent of learners reported bringing books home to read, but when there was none, only 24 percent of learners brought books home from school to read. As discussed earlier, reading scores tend to improve with learners being read to at home. However, only 41.25 percent of learners reported having other reading materials at home. Therefore, it is important to build school libraries and stock them with appropriate books and supplementary reading materials that learners can use in classes in groups or take home to read, especially when there is limited availability of text books and readers distributed to schools or limited access to reading materials for learners to read at home.

FIGURE 10. PERCENTAGE OF SCHOOLS WITH LIBRARIES



ATTENDING ECE

Overall, no statistically significant association was found between oral reading fluency and attending ECE either at the school the learner is currently enrolled or in a different school. However, boys who attended ECE programs scored 3 cwpm significantly less than boys who did not. But, for girls, while this relationship was positive, it was not statistically significant. Differential effects of ECE by sex could have influenced the overall weak association between ECE and oral reading scores. The level of correlation was also found to be similar between oral reading fluency and other lower-level subtasks such as listening comprehension, letter sounds, syllable reading, and non-words for learners who attended ECE and those who did not. This similarity was also noted between learners in schools with ECE and those who were not (Table 18). This lack of difference in correlation among subtasks between those who attended ECE and those who did not is also reflected in the result. The overall result may suggest that at present in Zambia the effect of ECE may not be large enough to affect reading fluency, probably because the curriculum is fairly new. It is to be noted that there has not been enough research to determine with confidence the impact of ECE programs on reading performance in the primary grades (Kim et. al. 2016). Therefore, more research is needed to better understand the effect of ECE on early grade reading performance.

TABLE 17. PEARSON CORRELATIONS BETWEEN ORAL READING FLUENCY AND OTHER SUBTASKS

	LEARNER ATTENDED ECE	LEARNER DID NOT ATTEND ECE	SCHOOL HAS ECE	SCHOOL DOES NOT HAVE ECE
Listening Comprehension vs ORF	0.25	0.27	0.23	0.29
Letter Sounds vs ORF	0.53	0.52	0.51	0.53
Syllable Sounds vs ORF	0.88	0.88	0.88	0.88
Non-word Reading vs ORF	0.88	0.89	0.88	0.89

RESULTS: SAMPLE CHARACTERISTICS

This section presents selected descriptive statistics from the SSME head teacher, teacher, and learner questionnaires, as well as the school inventory checklist to shed light on various contextual factors that may relate to learners' reading abilities in the five target provinces in Zambia. Frequencies, distributions, and weighted averages are presented and disaggregated by where appropriate, by learner sex and language. See Annexes 4, 5, 6, and 7 for the complete descriptive results for the learner, teacher and headteacher questionnaires and school inventory.

LEARNER CHARACTERISTICS

AGE

Learners in Zambia are expected to enter primary school at age seven. As a result, the appropriate age for a Grade 2 learner is eight to nine years old (FHI 360, 2018). However, the average age of learners across languages was 9.45 years. There were some variations by language and learner sex. For example, learners tested in Cinyanja were the oldest at ten years of age, while learners tested in Chitonga were the youngest at about 8.9 years of age. On average, boys tended to be older than girls. Table 18 shows the distribution of learners by language in relation to the appropriate age for Grade 2. There were several learners who were younger than eight years old. Overall, 6.60 percent of girls and 5.2 percent of boys assessed were younger than eight years old; however, this varied by language. For example, 2.9 percent of learners assessed in Cinyanja were less than eight years old, in comparison to 8.13 percent of learners assessed in Lunda.

TABLE 18. DISTRIBUTION OF SAMPLE BY AGE[19]

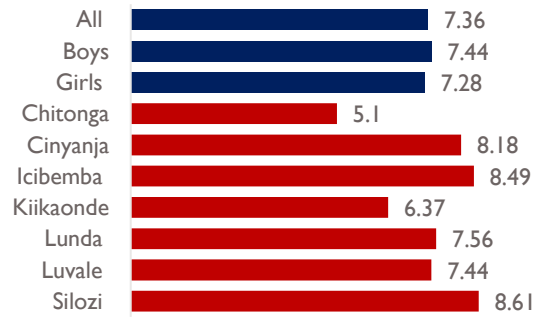
LANGUAGE	UNDERAGE	GRADE 2 AGE	SLIGHTLY OVER-AGE	VERY OVER-AGE
Chitonga	7.36%	60.28%	27.74%	4.62%
Cinyanja	2.90%	31.03%	42.47%	23.61%
Icibemba	6.23%	47.40%	38.39%	7.98%
Kiikaonde	6.13%	54.23%	32.23%	7.41%
Lunda	8.13%	48.76%	35.05%	8.06%
Luvale	4.78%	56.66%	30.51%	8.05%
Silozi	6.36%	57.05%	29.64%	6.95%

There were more over-age learners in the sample than underage learners. At least one fourth of all learners assessed in each language were over-age; however, this varied by language. For example, approximately two thirds of learners assessed in Cinyanja were over-age by at least one year, and 23.61 percent were 12 years or older. There was also a higher proportion of boys who were over-age in comparison to girls. For example, 12.64 percent of boys were 12 years or older, in comparison to 7.34 percent of girls.

[19] Underage learners are 6 or 7 years old; Grade 2 learners are 8 or 9 years old; slightly over-age learners are those who are one to two years behind, or 10 and 11 years old; and very over-age learners are those who are 12 years or older.

GRADE 2 REPETITION

FIGURE 11. GRADE 2 REPEATERS (PERCENT OF LEARNERS)

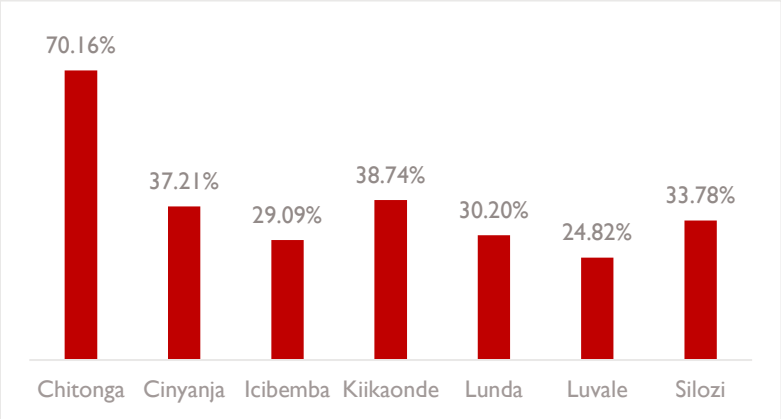


Overall, a total of 7.36 percent of learners reported attending Grade 2 in the previous academic year and therefore are repeating the grade. As shown in Figure 11, both girls and boys repeated Grade 2 at about the same rate; however, there were some variations by language. The share of repeaters in the sample ranged from 5.1 percent in Chitonga to 8.6 percent for Silozi.

Although at least one third of learners were over-age, the repetition rates do not closely match the rate of over-age learners in the sample. While the data cannot tell us why this is the case, there are several contextual factors that might explain these findings. First, there is no official MoGE policy on detaining learners, and as a result some schools implement their own policies to detain learners who do not perform well. Second, some parents may also request that their children be detained. Third, in rural areas, learners may have to travel long distances to get to school, and as a result sometimes learners enroll after the expected enrollment age of 7 years. Fourth, community schools may not have an age limit policy for enrollment, so over-age children may choose to specifically enroll in these schools. Further research is needed to better understand these findings.

EARLY CHILDHOOD EDUCATION

FIGURE 12. LEARNERS ATTENDANCE IN ECE, BY LANGAUGES (PERCENT OF LEARNERS)



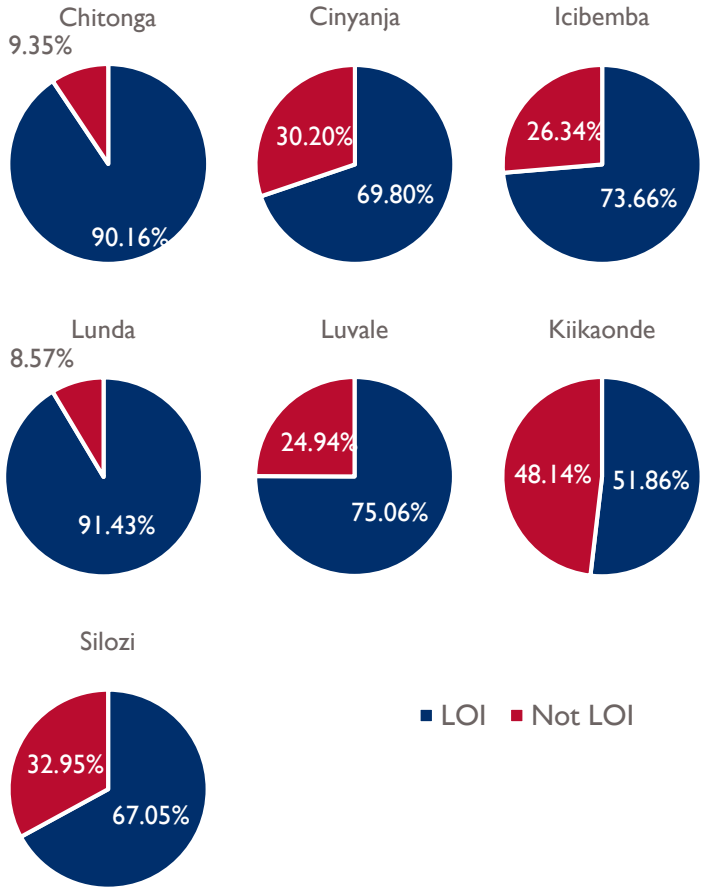
Head teacher questionnaire showed that 41 percent of schools included in the sample had an active ECE program. Baseline data from learner questionnaires show that 44.63 percent of the learners attended ECE, either in the school in which they are currently enrolled or elsewhere in Zambia. While 45.87 percent of learners currently enrolled in GRZ schools reported attending ECE anywhere in Zambia, only 37.99 percent of learners enrolled in community schools reported attending ECE anywhere in Zambia. Girls were slightly more likely to attend (46.63 percent) in comparison to boys (42.54 percent). Figure 12 shows the breakdown of ECE attendance by language. Whereas 70 percent of learners tested in Chitonga reported attending ECE somewhere in Zambia, in every other language at most only 39 percent of learners attended ECE. The stark difference in enrollment in ECE between learners in Chitonga versus other LoIs may be because Chitonga is primarily spoken in the Southern province, whose principal economic sector is tourism. As such, the province may have more resources to invest in ECE programs in its primary schools, and the socioeconomic status of learners may also be higher on average. However, as discussed earlier, attending ECE did not significantly predict oral reading fluency, perhaps owing to

newness of the ECE curriculum, which needs to be strengthened to prepare learners to better transition to primary school.

LANGUAGE SPOKEN BY LEARNERS AT HOME

Parents at home often help children learn new vocabulary and grammatical structures, complementing what they are learning in school. To examine the extent that learners are utilizing the LoI at home with their family, assessors asked learners what language they primarily speak at home. Overall, 73 percent of learners primarily spoke the LoI at home. There were minimal differences by learner sex, with more than three fourths of the learners of either sex reporting they speak the LoI at home as their primary language. However, there were differences noted by language. Figure 13 demonstrates that the percentage of learners reporting that they speak the LoI at home as their primary language ranged from 91 percent among learners tested in Lunda to 52 percent among those tested in Kiikaonde.

FIGURE 13. PERCENT OF LEARNERS SPEAKING LOI AT HOME



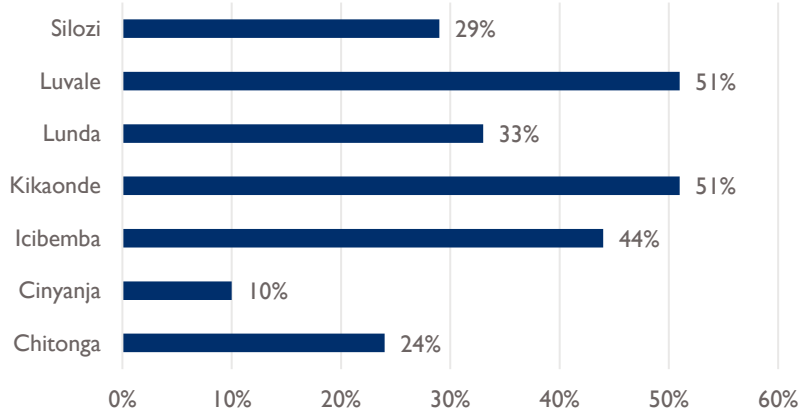
Evidence suggests that children learn to read best in a language that they know and understand (Kim et. al. 2016; UNESCO 2014). Differences in use of LoI at home by languages may suggest that some children are learning in school in a second or additional language. Therefore, such learners may require additional instructional support to build their vocabulary and listening comprehension skills to enable them to learn to read in the LoI. Targeted training in evidenced-based approaches that support second language acquisition should be prioritized in schools with a higher percentage of second language learners. It may be beneficial for teachers of Kiikaonde to receive training on evidenced-based approaches that support second language acquisition in the classroom.

LEARNER ABSENTEEISM

Early stunting or severe undernutrition is linked with subsequent deficits in literacy, numeracy, and educational attainment later in life (UNESCO 2009). To examine health and nutrition, the learner questionnaire asked about attendance during the past week as well as whether they ate breakfast on the day of the assessment. About 45 percent of learners reported that they were absent during the last week.

However, the 2018 Baseline EGRA took place while national exams were taking place. As a result, the high level of absenteeism may be a result of learners being sent home to ensure there is sufficient classroom space rather than due to illness. There was only a one percentage point difference between boys and girls, at 45.5 percent and 44.5 percent, respectively. Among languages, learner absenteeism was highest among learners assessed in Cinyanja and lowest among learners assessed in Kiikaonde.

FIGURE 14. LEARNERS WITHOUT BREAKFAST AND A SCHOOL FEEDING PROGRAM



LEARNER EATING BREAKFAST

About 54 percent of learners reported that they had not eaten breakfast on the day of the assessment.[20] This result is similar to the results from ECZ's 2015 National Assessment Survey of Learning Achievement at Grade 2. At the same time, only 39 percent of learners in the baseline reported that their school had a feeding program. There are large differences by language, with 75 percent of learners assessed in Cinyanja reporting that their school had a feeding program, in comparison to only 11 percent of learners in Kiikaonde. A cross-tabulation between these two variables indicates that between 10 and 50 percent of learners had not eaten anything on the day of the assessment. Figure 14 shows the differences by language. More than half of learners in Kiikaonde and Luvale reported that they had not eaten breakfast and that their school did not have a feeding program. However, learners in Kiikaonde and Luvale did not consistently score worse than learners assessed in other languages. In addition, overall no strong correlation was noted between eating breakfast on the day of the assessment and oral reading fluency scores.

READING HABITS AT HOME

Almost half of all learners did not have reading materials at home to read. The lack of home reading material for most learners would influence how often learners read out loud at home and how often someone else reads to them. While 45.8 percent of learners asserted that they read out loud at home sometimes, only 6.9 percent reported that they do so every day. Similarly, only 57 percent of learners reported that someone reads to them at home sometimes, while only 7 percent reported that someone reads to them daily. Further, 36.9 percent of learners admitted to never reading out loud, and 36.64 percent reported that they were never read to at home.

[20] National Assessment Survey of Learning Achievement in Grade 2: Results for Early Grade Reading. April 2015.

PARENTAL LITERACY RATES

In the learner questionnaire, learners were asked a simple yes or no question as to whether their parents could read or write. Across all languages, almost 80 percent of learners reported that their fathers could read, and approximately 70 percent of learners reported that their mothers could read. However, among learners assessed in Cinyanja, Lunda, and Luvale, more than 25 percent of learners reported that their mother could not read. In Luvale, 21 percent of learners reported that their father could not read, in comparison to only 8 percent of learners in Chitonga.

HOME ENVIRONMENT

Learners were asked a series of questions about their home environment, including whether they had electricity or other consumer goods. This data can shed light on learners' socio-economic status. Electricity can extend the time that learners can read and do homework at night. However, overall, only 35 percent of all learners reported that their homes had electricity.

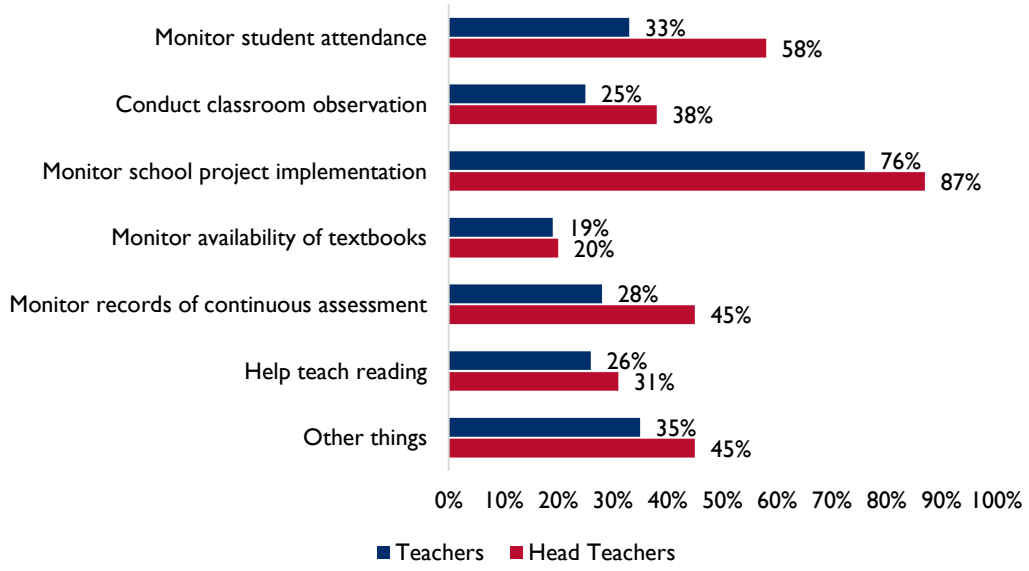
According to a 2016 UNICEF study, girls between the age of 5 and 14 years old spend 40 percent more time on household chores every day such as collecting firewood than boys (UNICEF 2016a). Time that children spend on household chores reduces the amount of time they can dedicate to doing their homework and practicing reading. In the 2018 Baseline EGRA, Grade 2 learners were asked what type of cooking fuel was used in their home. Over 69 percent of learners reported that firewood was used, and 26 percent of learners reported that their home used a charcoal burner, with no statistically significant difference noted by learner sex.

Interactive radio instruction has been found to have a positive effect on learners' reading performance (Ho & Thukral 2010). To determine whether radio or television instruction would be accessible to learners at home, learners were asked whether their home has a radio or television. Overall, 66.6 percent of learners reported having a radio at home, and 34.9 percent of learners had television at home.

FAMILY INVOLVEMENT IN SCHOOLS

Given the importance of parental involvement for school accountability, teachers were asked whether they were satisfied with the level of parental support. Approximately 74 percent of teachers reported that they were unsatisfied with the level of parental involvement at school. However, this varied by language, with one in three teachers in Lunda reporting that they were satisfied with the level of parental involvement, while less than one in five in Chitonga, Kiikaonde and Luvale reported satisfaction. The low level of satisfaction among teachers may be a reflection of the low participation rate of parents in classroom activities. Figure 15 shows the percentage of teachers and head teachers who reported that parents participated in each of the activities. By and large, parents appear to most often monitor the implementation of various types of school projects (76 percent of teachers, 87 percent of head teachers), and they are least likely to monitor the availability of textbooks (only 19 percent of teachers and 20 percent of head teachers). It was also uncommon for parents to help teach reading or to conduct classroom observations.

FIGURE 15. PARENT PARTICIPATION IN SCHOOL AND CLASSROOM ACTIVITIES



TEACHER CHARACTERISTICS

TEACHER QUALIFICATIONS AND EXPERIENCE

Many teachers appear to be new to the profession, with almost half of all teachers surveyed reporting that they had 5 years or less of experience. About 30 percent of teachers reported having between six and 10 years of experience, and 15 percent had between 11 and 15 years of experience. The proportion of teachers with 16 years or more of experience was the lowest, with 9 percent of teachers falling within this category. Teachers in Kiikaonde appear to have the most experience, with 32 percent reporting 11 or more years of experience, whereas only one in five teachers in Cinyanja and Silozi have 11 or more years of experience.

Research suggests that reading must be taught in specific ways. As a result, it is crucial that teachers receive high quality training on how to effectively teach children to read (Graham and Kelly 2018). However, most teachers at baseline reported that the highest level of education they completed was grade 12 (77 percent of teachers), and only one percent reported having a bachelor's degree. Teachers also typically had a teacher certificate or diploma (69 percent); however, 14 percent reported that they did not have any professional qualifications (like a teacher certificate, secondary teacher diploma, or a bachelor's degree in primary education). Teacher qualifications varied by language, with 21 percent of teachers in Cinyanja reporting that they did not have any professional qualifications, while only 9 percent of teachers in Kiikaonde did not.

INSTRUCTION TIME DEDICATED TO READING

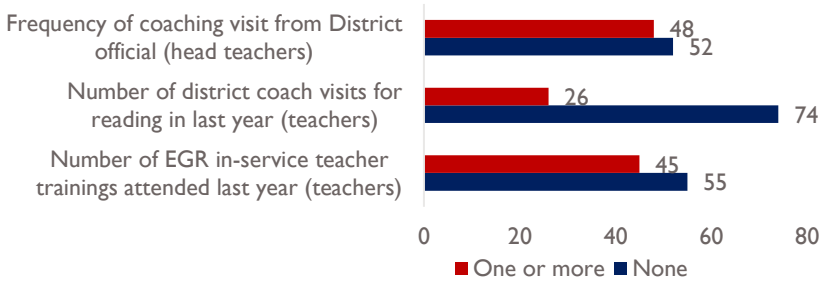
Learners need to receive systematic reading instruction as well as regular practice in order to develop fundamental reading skills. This requires that enough instructional time be dedicated specifically to the teaching of reading (Kim et al. 2016). To assess teachers' classroom practices related to providing specific instruction on reading, the teacher questionnaire asked teachers for length of their reading lessons in

minutes as well as to what extent they follow their weekly schedule for reading instruction. Just over 60 percent of teachers reported that their reading classes last between 40 to 60 minutes, and 88 percent of teachers reported that they follow a weekly schedule for reading mostly or always. The Time to Learn activity in Zambia similarly found that teachers on average devoted 50 minutes to teaching literacy during its midline evaluation of community-run schools in six provinces in Zambia (Falconer-Stout et al. 2015).

TEACHER TRAINING AND COACHING

According to MoGE standards, schools should receive at least two visits per term from district education officers. The majority of teachers lack access to regular in-service training and coaching visits. Figure 16 shows that nearly 55 percent of class teachers reported that they had not participated in one in-service training for EGR in the last year. However, among those who did, 99 percent found the training useful or very useful. This indicates that teachers included in the sample value training on how to teach reading to early grade learners, but a majority have not had the opportunity to receive training on the topic.

FIGURE 16. EGR IN-SERVICE TRAINING AND COACHING FOR TEACHERS (PERCENT REPORTING)



While there is no official MoGE policy regarding pedagogical coaching, MoGE has implemented the School Program of In-service Training (SPRINT), which utilizes both school- and zone-level in-service coordinators to provide coaching to teachers. However, the program is not compulsory. Figure 16 also shows that 74 percent of teachers had not received a coaching visit from a district education official in the last year. But among the teachers who had received at least one visit, 98 percent of them rate the visit(s) as very useful or useful. Figure 16 also shows that that 52 percent of head teachers revealed that their school never received a coaching visit from district education officials in the last year, which is less than the data reported in teacher questionnaire (74 percent). The data suggest that coaching visits to schools are not reaching enough teachers. Similar to EGR in-service training, there is a disconnect in that a majority of teachers have not had the chance to receive coaching visits, although it is evident that teachers who receive the visits value their utility.

LANGUAGE SPOKEN OFTEN BY TEACHERS IN CLASS

To examine whether teachers are providing instruction in the official LoI, teachers were asked to report whether they often speak the LoI in the classroom. Overall, 93 percent of teachers reported that they often speak in the LoI in the classroom. Evidence suggests that children learn to read best in a language that they know and understand (UNESCO 2014). A cross tabulation was conducted to examine whether the language spoken by the learner at home matched the LoI. The results shown in Table 19 indicate the degree of match between the learners' familiar language and the language used in class. While there was a high degree of match in Lunda at 89.5 percent, it was the lowest at 50.56 percent in Icibemba. In addition, there was a low degree of match in Kiikaonde. Given the sensitive nature of asking teachers if they are proficient in the language that they teach as well as the high probability of response bias, the teacher questionnaire did not ask teachers about their language proficiency.

TABLE 19. MATCHING LANGUAGE SPOKEN BY LEARNER AT HOME AND LOI

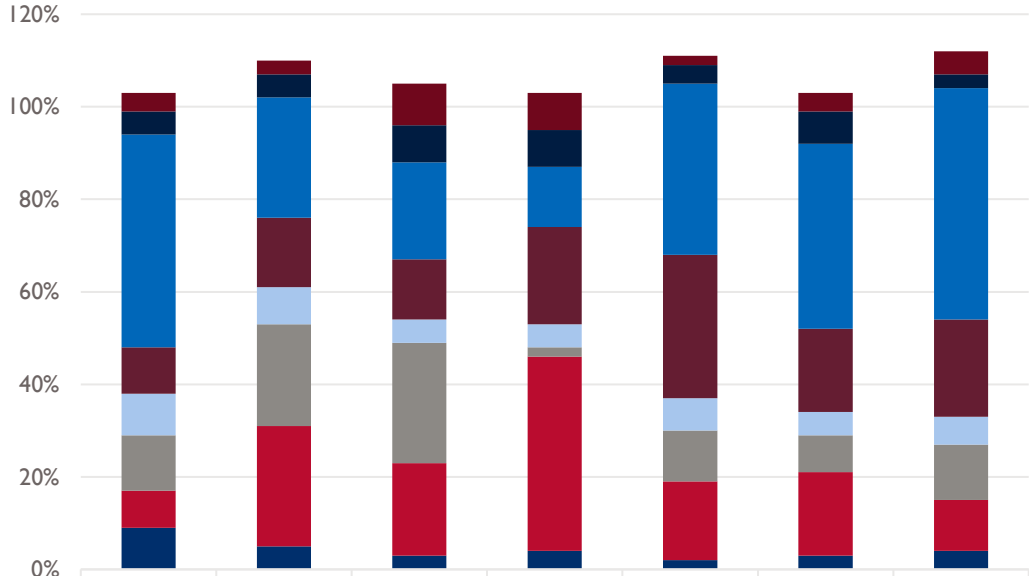
LANGUAGE	PERCENT MATCH
All	73.06%
Chitonga	86.48%
Cinyanja	73.45%
Icibemba	50.56%
Kiikaonde	57.84%
Lunda	89.52%
Luvale	74.82%
Silozi	70.39%
Government-run primary schools	72.70%
Community schools	74.40%

USAGE OF CURRICULUM AND INSTRUCTIONAL MATERIALS

The use of teachers' guides, which contain structured or scripted lessons, in low- and middle-income countries is associated with a positive impact on oral reading fluency (Piper et al. 2018b). With support from USAID, the Read to Succeed (RTS) and Time to Learn (TTL) activities partnered with MoGE to develop teachers' guides for Grades 1–4 for the Primary Literacy Program. These are currently being implemented under the revised curriculum. However, only three fifths of teachers in the sample reported that they have the approved teachers' guide. Among those who have the guide, more than four-fifths use it most of the time or always. Often, schools in low- and middle-income countries lack access to basic instructional materials to support learning in the classroom (Kim et al. 2016). Among the teachers in the sample, only one in three reported using textbooks to teach reading. Other materials such as worksheets (4 percent), story books (13 percent), and flashcards (15 percent) also appear to be rarely used by teachers. This is probably because these materials are either not available in most schools, or, if they are available, there are only a few copies.

INSTRUCTIONAL FEEDBACK TO LEARNERS

FIGURE 17. TEACHERS' REACTIONS TO INCORRECT ANSWERS



	Chitonga	Cinyanja	Icibemba	Kiikaonde	Lunda	Luvale	Silozi
Don't know	4%	3%	9%	8%	2%	4%	5%
Other	5%	5%	8%	8%	4%	7%	3%
Hits student	46%	26%	21%	13%	37%	40%	50%
Corrects	10%	15%	13%	21%	31%	18%	21%
Asks again	9%	8%	5%	5%	7%	5%	6%
Asks another student	12%	22%	26%	2%	11%	8%	12%
Encourages	8%	26%	20%	42%	17%	18%	11%
Explains	9%	5%	3%	4%	2%	3%	4%

Teachers often provide a combination of oral and written feedback to learners. In order to better understand how learners in the sample receive feedback, learners were asked what proportion of their work was corrected by their teacher as well as their teachers' reaction both when they do well and when they are incorrect. Most learners had between one quarter to one half of their pages corrected. However, there are differences based on language. For example, 15 percent of learners in Cinyanja reported that no pages had been corrected by their teacher. In contrast, almost one in five learners in Lunda had all their pages corrected by the teacher.

Learners were also asked two separate questions regarding teacher practices when they do well in comparison to when they are wrong. Figure 17 shows what learners reported as their teachers' response when a learner is wrong. Hitting the learner appears to be a common practice, with almost half of all learners in Silozi and Chitonga reporting that their teachers hit them. Hitting was reported to be the lowest in Kiikaonde (13 percent of learners), with a larger share of learners reporting that their teacher encourages them (42 percent) or corrects them (21 percent). In contrast, in response to what the teacher does when they do well, more than 80 percent of learners in Kiikaonde, Lunda, and Silozi reported that they receive praise. In contrast, only 58 percent of learners in Chitonga and 63 percent of learners in Cinyanja did. However, 20 percent of learners in Chitonga and 35 percent of learners in Cinyanja reported that their teacher's reaction when they do well is to give them a prize. Among learners in other languages, the percentage of learners who reported this response was lower.

PEDAGOGICAL PRACTICES

To understand the various pedagogical practices employed by teachers to help support children learning to read, assessors asked learners about the strategies teachers advise them to use. For example, over 80 percent of learners reported that their teacher draws pictures to represent new words. Other practices often used included (1) telling the letter name and sounds, with between 75 and 93 percent reporting their teacher does this, (2) asking learners to write letters with their finger, with between 72 percent and 86 percent of learners reporting that their teachers use this practice, and (3) reminding the learner to use their finger when reading, with approximately three out of four learners across languages reporting that their teacher does this. Other practices were unevenly employed by teachers. For example, in Chitonga, Cinyanja, Kiikaonde, Lunda, and Luvale, more than 80 percent of learners reported that their teacher tells them to look at all the letters, while in Icibemba, only 67 percent did. Similarly, 58 percent and 59 percent of learners in Icibemba and Silozi reported that their teachers tell them to put a finger space between words, in contrast to all other languages, where more than 80 percent of learners reported this.

SCHOOL FEATURES

AVAILABILITY OF BOOKS AT SCHOOL

Local language readers are largely absent from classrooms. Overall, only 12 percent of learners reported having a local language reader, and 9 percent of learners reported having an English reader. However, 72 percent of learners reported that they have exercise books for writing in local languages during literacy lessons. As literacy is taught from ECE to Grade 2 and LoI used from ECE to Grade 4 in accordance with the revised curriculum, there were fewer English readers reported in the sample. Furthermore, according to the school inventory, more than 80 percent of the schools do not have a library, and another 5 percent of schools have a library that learners are not allowed to use.

Approximately 80 percent of head teachers stated that their school did not have the appropriate number of textbooks with a ratio of three pupils to a text book at the beginning of the school year. Moreover, 68 percent of the schools that did not have the appropriate number of textbooks reported that they had never received them. These results corroborate the results of the data concerning the scarcity of local language readers, local language exercise books, and English language readers.

SCHOOL CONDITIONS

The school inventory provides a snapshot of the schools' conditions. More than four-fifths of schools in the sample needed major repairs in terms of fixing damaged furniture, broken windows, and damaged classroom walls. Nearly three-fourths of schools did not have electricity. A majority of schools had a telephone; most often, the school's phone was a mobile phone. Overall, 64 percent of schools had six or fewer functional toilets at school, and more than half had two or fewer functional toilets specifically for girls.

CONCLUSIONS

At baseline, learners in the five target provinces exhibited low alphabetic knowledge and decoding skills. Learners in all languages struggled with letter sounds, syllable sounds, and non-word reading, which are prerequisites to read fluently. Decoding skills captured by syllable sounds and non-word reading are strongly correlated with oral reading fluency, and oral reading fluency is closely related to reading comprehension. As a result, low performance in each of these subtasks is highly predictive of oral reading fluency and reading comprehension skills.

Most Grade 2 learners could not demonstrate to read fluently and comprehend grade level text at the end of Grade 2. Only about 10.2 percent of learners were able to read fluently and comprehend grade level text at the end of Grade 2 indicating that learners understood and recalled very little of the content in the passage they read. Also, with only about a quarter of the Let's Read project's 2020 target of 40 percent being met at baseline, there is a large gap for the project to close for it to reach its target.

Oral reading fluency can be improved through reading practice, teaching methods, and availability of reading materials. Baseline results indicate that reading fluency scores tend to improve when learners have more practice reading at school and home; teachers use evidenced-based instructional practices in reading and provide positive feedback to learners when they do well; reading materials are available to learners at school and in school libraries and used by them; and the home and family environment supports learners.

Attending ECE was low and oral reading fluency scores were not significantly higher for learners that attended ECE relative to those that did not. However, attending ECE could potentially improve development of learners' reading skills as evidenced in many developing countries through a positive relationship between ECE attendance and early grade reading skills (Yoshikawa & Kabay 2015; Weatherholt et al., 2018). The limited access to ECE and attendance in Zambia could therefore limit learners' ability to sufficiently develop skills to transition into primary school, and eventually contribute to the low levels of reading fluency and comprehension skills. More research is needed to better understand the effects of ECE on early grade reading performance.

Overall, a quarter of the learners are learning in a language that is not the primary language spoken at home. This indicates that some children are learning in a second language and as such may require additional instructional support to build their vocabulary and listening comprehension skills to enable them to learn to read in the LoI. Evidence suggests that children learn to read best in a language they know and understand (Kim et. al. 2016; UNESCO 2014). Learners who are second language learners require additional instructional support to help map meaning onto the words they read because they lack the requisite oral language and vocabulary skills in the LoI (Kim et al. 2016).

RECOMMENDATIONS

Based on the baseline findings and conclusions, Education Data activity recommends the following to improve early grade reading skills among primary learners in Zambia:

Focus on developing learners' alphabetic knowledge and decoding skills. Policymakers and practitioners should focus on supporting learners to develop these fundamental skills to provide a strong foundation for oral reading fluency. Globally, evidence suggests that teachers need explicit training on how to teach reading skills, and yet many teachers in developing countries do not receive comprehensive training that focuses on teaching reading (Kim et al. 2016). At baseline, only 45 percent of teachers reported that they had participated in an in-service training for EGR in the last year, and only 26 percent had received a coaching visit from a district education official in the last year. Therefore, teachers should be trained on how to provide explicit instruction covering the five reading skills (phonics, phonemic awareness, vocabulary, fluency, and comprehension) and supported by a robust coaching component as they put new skills into practice in the classroom. Further, targeted training in evidence-based approaches that support second language acquisition in schools with a higher percentage of second language learners should be provided since overall a quarter of the learners are learning in a second language. All teachers should have MoGE-designated Grade 2 teachers' guides so that they can prepare their lessons during their free time or follow lesson procedures in accordance to the guidelines in the teachers' guides. Training should also include ample practice on how to use the Grade 2 teacher guides that MoGE developed or revised in all local languages. Also, policymakers and practitioners should assess resources such as audio files developed for teaching letter sounds and syllable sounds developed under earlier projects for some languages (Education Development Center 2018) for their effectiveness as teaching aids. If the resources are found to be effective, they could be produced in all seven languages to help teach letter and syllable sounds.

Encourage parents and household members to read to learners regularly. Reading fluency scores are clearly shown to improve with someone at home reading to learners, among other factors. This robust relationship suggests an excellent opportunity for community level programs to support children's exposure to reading at home by encouraging parents and guardians to read to their children on a regular basis. The USAID-funded Read to Succeed activity in Zambia implemented community-level awareness campaigns to improve parental and community involvement in schools and provide support to learners (RTI International 2015). Therefore, Let's Read project should ensure that lessons learned from these past experiences inform the rollout of these new activities to ensure that the results are sustainable. Moreover, reading fairs can be held to promote such parental behavior. Save the Children's Literacy Boost project included reading fairs and activities to support parents reading with their children that proved effective (Save the Children 2012). Results from the Literacy Boost project in both Pakistan and Malawi suggest that after-school reading clinics staffed by community and youth volunteers as mentors help ensure that learners are read to more regularly and practice reading outside the classroom. Evidence also suggests that community radio can also be effectively used to play entertaining skits that promote reading to children with measured impact (Education Development Center 2010).

Improve access to adequate and appropriate reading materials, and their use at school. Adequate textbooks and appropriate reading materials, including supplementary reading materials developed through the Let's Read project, should be made more readily available for children to read at school and take home. Since reading scores tend to improve with learners being read to at home and among learners who have access to a school library, MoGE should also work with international and local

partners to build and stock school libraries nationwide so learners have access to a wide range of reading materials to use, and are also encouraged to use them well. Furthermore, MoGE and the Let's Read project should partner to develop contextually relevant books to be distributed in community book banks to support reading at home. The Literacy Boost program in Malawi included a community book bank component and found that children who brought home and read books from the book bank had significantly higher vocabulary gains over those who did not (Save the Children 2012).

Ensure improvements in learning outcomes continue to be equal among boys and girls. Evidence suggests that learners with stronger reading skills may be less likely to repeat grades and more likely to complete primary school (Kim et al. 2016). Therefore, all interventions should focus on ensuring that the current lack of gender gap in Zambia is maintained to avoid learning inequities. After school clubs staffed by local mentors in some African countries have been shown to be gender neutral in improving reading skills (Save the Children 2012).

Increase access to and quality of ECE programming to build learners' pre-reading and initial reading skills. MoGE should continue its efforts to expand access to ECE programs, especially in rural and disadvantaged areas. Also, the ECE curriculum should be strengthened to help learners develop pre-reading skills such as letter sounds and transition better to Grade 1, where they could learn to decode, in order to attain reading fluency by Grade 2. Let's Read project aims to strengthen ECE programs under its Let's Get Ready sub-strategy by translating the existing MoGE teachers' guides, developed with support from UNICEF, into all seven languages and by disseminating them to ECE teachers. In addition, Let's Read project also aims to develop and provide ECE classroom resource kits and train ECE teachers to use these materials. The Let's Read project should also support increased access to ECE programs through employing social and behavioral change communications (SBCC) strategies to raise awareness among parents and community members on the importance of early childhood stimulation and play. While SBCC approaches have had measured impact in supporting behavior change in the health sector, a USAID study concluded that SBCC strategies may hold potential in supporting parental and community engagement in early grade reading programs as well (Schmidt 2014). There has not been enough research to determine with confidence the impact of ECE programs on reading performance in the primary grades (Kim et. al. 2016). Therefore, special studies are needed to examine the effects of ECE interventions on pre-reading skills to inform improvements and support evidence-based policymaking.

Develop language-specific benchmarks to account for inherent differences among LoIs. The MoGE benchmarks developed in 2014 apply uniformly across all seven GRZ-designated LoI and were used by Let's Read project to set its targets. But, inherent structural differences among languages cause scores to differ by language. Therefore, benchmarks should vary by languages. While an overall target across languages could be used (for example, the target of 40 percent set by Let's Read project), setting benchmarks by language will help account for inherent language differences and yield robust results to enable better monitoring of changes over time.

Embed a process evaluation to examine the links between Let's Read project activities and reading performance. Future external evaluations should include assessing the fidelity of the Let's Read project's implementation alongside learner assessments to understand how it achieved its intended outcomes. In addition, classroom observations should be conducted to understand the degree to which teaching training and coaching components lead to the uptake of new instructional methods. In countries where baseline levels are low, it is challenging to move a large share of non-readers to reach minimum

standards for reading in just a few years, although evidence suggests that projects that include training on evidenced-based curricula, instructional guides and materials, and a robust coaching component can shift the status quo from baseline to midline in two years (Kelly & Graham 2018). In addition, detailed data on implementation costs should be gathered and compared with reading performance to understand the cost effectiveness of the interventions and to provide valuable data to inform MoGE's programmatic and policy decisions.

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ANNEX TABLE OF CONTENTS

ANNEX 1: COMPLETE DISAGGREGATED EGRA RESULTS BY LANGUAGE, SEX, SCHOOL TYPE AND LEARNER ATTENDENCE IN ECE FOR EACH SUBTASK

TABLE A1: EGRA SUBTASK MEAN SCORES BY LANGUAGE

SUBTASK	ALL	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUVALE	SILOZI
Listening comprehension	2.05	2.36	1.72	2.01	2.91	2.35	2.24	2.11
Letter sound identification	6.82	6.41	6.71	8.09	6.13	5.61	5.11	7.54
Syllable identification	10.18	8.67	10.09	9.57	8.48	7.42	14.18	13.99
Non-word reading	4.29	3.88	3.83	6.41	2.92	4.68	5.17	5.37
Oral reading fluency	5.91	4.38	6.62	5.32	3.92	5.08	7.51	7.65
Reading comprehension	0.531	0.47	0.47	0.60	0.42	0.57	0.66	0.78
English vocabulary	7.89	8.59	7.46	6.69	9.65	7.44	7.68	8.11
English listening comprehension	0.85	1.10	0.74	0.64	1.50	0.67	0.93	0.66

TABLE A2: EGRA SUBTASK MEAN SCORES BY LANGUAGE AND LEARNER'S GENDER

SUBTASK	CHITONGA			CINYANJA		
	GIRLS	BOYS	DIFFERENCE	GIRLS	BOYS	DIFFERENCE
Listening comprehension	2.25	2.48	0.23*	1.54	1.92	0.38***
Letter sound identification	7.12	5.67	-1.46**	6.83	6.59	-0.23
Syllable identification	9.58	7.72	-1.86**	10.21	9.96	-0.26
Non-word reading	4.28	3.47	-0.81*	3.69	3.98	0.29
Oral reading fluency	4.97	3.75	-1.22*	6.68	6.56	-0.12
Reading comprehension	0.53	0.41	-0.12*	0.47	0.48	0.02
English vocabulary	8.66	8.52	-0.14	7.39	7.53	0.14
English listening comprehension	1.13	1.07	-0.06	0.70	0.78	0.08

SUBTASK	ICIBEMBA			KIIKAONDE		
	GIRLS	BOYS	DIFFERENCE	GIRLS	BOYS	DIFFERENCE
Listening comprehension	2.00	2.03	0.04	2.84	2.99	0.15
Letter sound identification	8.26	7.91	-0.35	6.14	6.13	-0.01
Syllable identification	10.25	8.88	-1.37	8.18	8.80	0.62
Non- word reading	6.85	5.97	-0.89	2.83	3.02	0.18
Oral reading fluency	5.72	4.92	-0.81	3.73	4.12	0.38
Reading comprehension	0.67	0.52	-0.15	0.39	0.46	0.07
English vocabulary	6.60	6.79	0.19	9.54	9.76	0.23
English listening comprehension	0.71	0.57	-0.14	1.50	1.50	0.01

SUBTASK	LUNDA			LUVALE		
	GIRLS	BOYS	DIFFERENCE	GIRLS	BOYS	DIFFERENCE
Listening comprehension	2.11	2.61	0.49***	2.08	2.42	0.33***
Letter sound identification	5.10	6.15	1.05	5.18	5.04	-0.14
Syllable identification	5.87	9.05	3.18***	14.15	14.22	0.07
Non-word reading	3.74	5.67	1.93**	5.31	5.02	-0.29
Oral reading fluency	3.97	6.24	2.26**	7.42	7.60	0.19
Reading comprehension	0.42	0.73	0.30**	0.66	0.65	-0.01
English vocabulary	7.29	7.59	0.30	7.64	7.73	0.08
English listening comprehension	0.63	0.70	0.07	0.93	0.92	0.00

SUBTASK	SILOZI		
	GIRLS	BOYS	DIFFERENCE
Listening comprehension	2.05	2.18	0.13
Letter sound identification	7.94	7.13	-0.82
Syllable identification	15.43	12.50	-2.93**
Non-word reading	5.95	4.77	-1.18**
Oral reading fluency	8.63	6.65	-1.98**
Reading comprehension	0.86	0.69	-0.17***
English vocabulary	8.16	8.05	-0.11
English listening comprehension	0.68	0.64	-0.04

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A3: EGRA SUBTASK MEAN SCORES BY SCHOOL TYPE

SUBTASK	CHITONGA			CINYANJA		
	COMMUNITY	GRZ	DIFFERENCE	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	2.41	2.34	-0.07	1.31	1.79	0.48**
Letter sound identification	5.65	6.61	0.95	5.21	6.95	1.74
Syllable identification	7.06	9.08	2.02	8.13	10.39	2.26
Non-word reading	3.22	4.05	0.83	3.15	3.93	0.78
Oral reading fluency	3.40	4.62	1.22	5.52	6.79	1.27
Reading comprehension	0.39	0.49	0.10	0.43	0.48	0.05
English vocabulary	8.37	8.65	0.28	6.82	7.55	0.73*
English listening comprehension	1.04	1.12	0.08	0.50	0.78	0.28**

SUBTASK	ICIBEMBA			KIIKAONDE		
	COMMUNITY	GRZ	DIFFERENCE	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	1.67	2.09	0.41*	3.01	2.89	-0.13
Letter sound identification	5.05	8.73	3.68*	6.00	6.16	0.16
Syllable identification	4.38	10.68	6.30*	7.65	8.67	1.01
Non- word reading	2.62	7.22	4.61*	2.39	3.04	0.65
Oral reading fluency	2.40	5.95	3.55	2.84	4.16	1.32

Reading comprehension	0.30	0.66	0.37	0.33	0.44	0.12
English vocabulary	6.55	6.72	0.18	11.05	9.33	-1.73**
English listening comprehension	0.46	0.68	0.22	2.00	1.39	-0.61***

SUBTASK	LUNDA			LUVALE		
	COMMUNITY	GRZ	DIFFERENCE	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	2.27	2.59	0.32	2.21	2.25	0.04
Letter sound identification	5.33	6.39	1.06	4.63	5.18	0.54
Syllable identification	6.55	9.77	3.22	11.14	14.61	3.47
Non-word reading	4.24	5.86	1.62	4.27	5.29	1.03
Oral reading fluency	4.53	6.55	2.01	6.03	7.71	1.69
Reading comprehension	0.50	0.75	0.25	0.58	0.67	0.09
English vocabulary	7.14	8.24	1.10*	7.00	7.78	0.79*
English listening comprehension	0.58	0.90	0.32*	0.66	0.96	0.3

SUBTASK	SILOZI		
	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	2.06	2.12	0.07
Letter sound identification	6.03	7.75	1.72
Syllable identification	11.75	14.30	2.55
Non-word reading	4.22	5.52	1.30
Oral reading fluency	6.52	7.81	1.29
Reading comprehension	0.73	0.78	0.06
English vocabulary	7.76	8.16	0.40
English listening comprehension	0.56	0.67	0.11

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A4: MEAN SCORES OF LEARNERS THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	1.93	2.21	0.28***
Letter sound identification	6.64	7.03	0.39
Syllable identification	9.77	10.68	0.90
Non-word reading	4.03	4.64	0.60
Oral reading fluency	5.68	6.21	0.54
Reading comprehension	0.51	0.57	0.06
English listening comprehension	0.71	1.02	0.31***
English vocabulary	7.23	8.73	1.50***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.11	2.30	0.19	1.74	2.13	0.39***
Letter sound identification	6.76	6.18	-0.58	6.52	7.79	1.27*

Syllable identification	10.01	9.14	-0.87	9.54	12.03	2.50*
Non- word reading	4.26	4.00	-0.26	3.81	5.20	1.39**
Oral reading fluency	5.89	5.14	-0.75	5.46	7.16	1.70*
Reading comprehension	0.53	0.46	-0.07	0.48	0.65	0.17**
English listening comprehension	0.76	0.97	0.21**	0.66	1.07	0.41***
English vocabulary	7.38	8.63	1.25***	7.07	8.81	1.74***

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	1.80	2.15	0.35	1.95	2.22	0.26***
Letter sound identification	4.98	6.28	1.30	7.00	7.15	0.15
Syllable identification	7.75	7.78	0.03	10.21	11.13	0.92
Non-word reading	3.04	3.55	0.51	4.25	4.81	0.56
Oral reading fluency	4.26	4.68	0.42	5.98	6.45	0.47
Reading comprehension	0.41	0.48	0.07	0.53	0.58	0.05
English listening comprehension	0.67	0.95	0.28**	0.72	1.04	0.31***
English vocabulary	7.23	8.42	1.19***	7.23	8.78	1.55***

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A5: MEAN SCORES OF LEARNERS IN CHITONGA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN CHITONGA		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	2.28	2.39	0.11
Letter sound identification	6.05	6.58	0.53
Syllable identification	7.89	9.02	1.12
Non-word reading	3.51	4.05	0.54
Oral reading fluency	3.73	4.66	0.93
Reading comprehension	0.40	0.50	0.09
English listening comprehension	0.99	1.15	0.16
English vocabulary	8.15	8.79	0.64*

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.41	2.51	0.10	2.15	2.29	0.14
Letter sound identification	5.49	5.76	0.27	6.65	7.31	0.66
Syllable identification	7.21	7.97	0.76	8.64	9.95	1.31
Non- word reading	3.26	3.58	0.32	3.79	4.47	0.69
Oral reading fluency	3.29	3.97	0.68	4.22	5.27	1.05
Reading comprehension	0.35	0.43	0.08	0.46	0.56	0.09
English listening comprehension	0.95	1.13	0.18	1.03	1.17	0.14
English vocabulary	8.27	8.64	0.37	8.01	8.92	0.91*

SUBTASK	COMMUNITY SCHOOLS	GRZ SCHOOLS

	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.33	2.48	0.15	2.27	2.38	0.11
Letter sound identification	5.20	6.03	0.83	6.39	6.69	0.30
Syllable identification	7.54	6.77	-0.77	8.04	9.46	1.42
Non-word reading	3.18	3.28	0.10	3.64	4.21	0.56
Oral reading fluency	3.23	3.55	0.32	3.93	4.88	0.94
Reading comprehension	0.34	0.43	0.09	0.43	0.51	0.08
English listening comprehension	1.00	1.08	0.09	0.99	1.17	0.18
English vocabulary	8.10	8.60	0.50	8.16	8.83	0.66*

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A6: MEAN SCORES OF LEARNERS IN CINYANJA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN CINYANJA		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	1.63	1.87	0.24
Letter sound identification	6.95	6.27	-0.68
Syllable identification	9.64	10.81	1.17
Non-word reading	3.62	4.20	0.58
Oral reading fluency	6.28	7.20	0.92
Reading comprehension	0.46	0.51	0.05
English listening comprehension	0.69	0.82	0.14
English vocabulary	6.90	8.37	1.46***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	1.88	2.0	0.12	1.39	1.76	0.37*
Letter sound identification	7.49	5.07	-2.41*	6.43	7.35	0.92
Syllable identification	10.62	8.86	-1.76	8.71	12.57	3.86
Non- word reading	4.24	3.55	-0.69	3.04	4.79	1.76
Oral reading fluency	7.12	5.63	-1.49	5.48	8.63	3.15
Reading comprehension	0.55	0.37	-0.18	0.37	0.64	0.27
English listening comprehension	0.81	0.74	0.07	0.57	0.90	0.33***
English vocabulary	7.05	8.36	1.32***	6.77	8.37	1.60***

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	1.26	1.41	0.15	1.69	1.93	0.23
Letter sound identification	5.01	5.66	0.65	7.29	6.34	-0.95
Syllable identification	8.04	8.36	0.33	9.93	11.10	1.18
Non-word reading	3.04	3.43	0.39	3.73	4.30	0.57
Oral reading fluency	5.12	6.46	1.34	6.49	7.29	0.80
Reading comprehension	0.40	0.51	0.11	0.47	0.51	0.04

English listening comprehension	0.49	0.52	0.03	0.72	0.86	0.14
English vocabulary	6.62	7.30	0.68*	6.95	8.50	1.54***

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A7: MEAN SCORES OF LEARNERS IN ICIBEMBA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN ICIBEMBA		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	1.98	2.09	0.10
Letter sound identification	7.23	10.17	2.94**
Syllable identification	8.03	13.34	5.31***
Non-word reading	5.27	9.20	3.93***
Oral reading fluency	4.34	7.72	3.38***
Reading comprehension	0.49	0.86	0.37***
English listening comprehension	0.51	0.96	0.45***
English vocabulary	6.29	7.68	1.39***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.11	1.83	-0.27	1.86	2.29	0.43*
Letter sound identification	7.26	9.75	2.50*	7.20	10.49	3.29*
Syllable identification	8.23	10.73	2.50*	7.82	15.40	7.58***
Non- word reading	5.43	7.50	2.08	5.11	10.55	5.44***
Oral reading fluency	4.59	5.86	1.27	4.08	9.19	5.11***
Reading comprehension	0.49	0.61	0.12	0.49	1.06	0.56**
English listening comprehension	0.51	0.74	0.23	0.51	1.13	0.62**
English vocabulary	6.66	7.15	0.49**	5.89	8.10	2.21***

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	1.62	1.83	0.21	2.07	2.14	0.07
Letter sound identification	4.00	7.84	3.84	7.94	10.63	2.69**
Syllable identification	3.22	7.45	4.23	9.08	14.51	5.42***
Non-word reading	1.81	4.75	2.94	6.03	10.08	4.05***
Oral reading fluency	1.61	4.49	2.88	4.94	8.36	3.42***
Reading comprehension	0.20	0.54	0.33	0.56	0.92	0.37***
English listening comprehension	0.33	0.83	0.51	0.55	0.98	0.43**
English vocabulary	6.15	7.59	1.44*	6.32	7.70	1.38***

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A8: MEAN SCORES OF LEARNERS IN KIIKAONDE THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN KIIKAONDE		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	2.79	3.12	0.33*
Letter sound identification	5.64	6.98	1.34
Syllable identification	8.80	8.03	-0.77
Non-word reading	3.09	2.68	-0.41
Oral reading fluency	4.04	3.76	-0.28
Reading comprehension	0.44	0.39	-0.05
English listening comprehension	1.20	1.97	0.77***
English vocabulary	8.57	11.34	2.77***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.83	3.27	0.43*	2.75	2.98	0.23
Letter sound identification	5.01	8.02	3.01**	6.22	6.01	-0.21
Syllable identification	8.68	9.11	0.43	8.91	7.01	-1.90
Non- word reading	3.05	2.98	-0.07	3.11	2.39	-0.73
Oral reading fluency	4.11	4.19	0.07	3.97	3.35	-0.62
Reading comprehension	0.44	0.48	0.04	0.44	0.31	-0.13
English listening comprehension	1.23	1.94	0.71***	1.17	2.01	0.83***
English vocabulary	8.60	11.58	2.97***	8.54	11.12	2.57***

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.88	3.25	0.37	2.77	3.09	0.32*
Letter sound identification	5.55	6.80	1.25	5.66	7.01	1.36
Syllable identification	7.32	8.23	0.91	9.16	7.98	-1.17
Non-word reading	2.21	2.71	0.50	3.30	2.67	-0.63
Oral reading fluency	2.78	2.96	0.17	4.34	3.92	-0.42
Reading comprehension	0.31	0.36	0.05	0.47	0.40	-0.07
English listening comprehension	1.82	2.32	0.51*	1.05	1.90	0.85***
English vocabulary	10.03	12.85	2.82*	8.22	11.02	2.80***

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

TABLE A9: MEAN SCORES OF LEARNERS IN LUNDA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN LUNDA		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	2.33	2.41	0.08
Letter sound identification	5.49	5.89	0.40
Syllable identification	7.52	7.22	-0.30
Non-word reading	4.75	4.51	-0.24
Oral reading fluency	5.08	5.06	-0.02

Reading comprehension	0.57	0.57	-0.01
English listening comprehension	0.54	0.95	0.41**
English vocabulary	6.93	8.61	1.68***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.63	2.56	-0.07	2.04	2.27	0.23
Letter sound identification	6.21	6.00	-0.21	4.80	5.79	0.99
Syllable identification	9.33	8.41	-0.92	5.77	6.10	0.33
Non- word reading	5.98	4.93	-1.05	3.57	4.12	0.55
Oral reading fluency	6.56	5.46	-1.10	3.66	4.69	1.04
Reading comprehension	0.77	0.63	-0.14	0.38	0.51	0.13
English listening comprehension	0.56	1.02	0.46***	0.52	0.88	0.36
English vocabulary	7.11	8.73	1.63***	6.77	8.49	1.73***

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.18	2.30	0.12	2.39	2.43	0.05
Letter sound identification	4.06	6.54	2.47	6.03	5.76	-0.28
Syllable identification	5.21	7.82	2.61	8.39	7.09	-1.30
Non-word reading	3.45	5.01	1.56	5.25	4.41	-0.84
Oral reading fluency	3.45	4.94	1.48	5.70	5.09	-0.61
Reading comprehension	0.37	0.57	0.19	0.65	0.57	-0.08
English listening comprehension	0.50	0.63	0.13	0.56	1.01	0.46**
English vocabulary	6.88	7.30	0.42	6.95	8.88	1.92***

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A10: MEAN SCORES OF LEARNERS IN LUVALE THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN LUVALE		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	2.24	2.25	0.00
Letter sound identification	4.77	6.16	1.40
Syllable identification	13.81	15.30	1.49
Non-word reading	4.99	5.69	0.70
Oral reading fluency	7.26	8.25	0.99
Reading comprehension	0.63	0.73	0.10
English listening comprehension	0.73	1.53	0.80***
English vocabulary	7.22	9.08	1.85***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.43	2.39	-0.04	2.06	2.14	0.08
Letter sound identification	4.81	5.83	1.01	4.72	6.43	1.72

Syllable identification	14.34	13.85	-0.49	13.28	16.46	3.18
Non- word reading	5.09	4.79	-0.30	4.89	6.42	1.52
Oral reading fluency	7.59	7.67	0.08	6.92	8.71	1.78
Reading comprehension	0.64	0.68	0.03	0.62	0.77	0.15
English listening comprehension	0.74	1.54	0.80***	0.71	1.51	0.80***
English vocabulary	7.27	9.31	2.04***	7.18	8.90	1.72***
SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.30	1.74	-0.56	2.24	2.29	0.06
Letter sound identification	4.94	3.05	-1.89	4.74	6.42	1.68
Syllable identification	11.42	9.80	-1.63	14.20	15.75	1.56
Non-word reading	4.45	3.36	-1.09	5.08	5.89	0.80
Oral reading fluency	6.20	5.22	-0.98	7.43	8.49	1.07
Reading comprehension	0.59	0.54	-0.05	0.64	0.74	0.10
English listening comprehension	0.62	0.88	0.25	0.74	1.58	0.83***
English vocabulary	6.92	7.41	0.49	7.27	9.22	1.94***

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A11: MEAN SCORES OF LEARNERS IN SILOZI THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN SILOZI		
	NO ECE	YES ECE	DIFFERENCE
Listening comprehension	2.05	2.25	0.20
Letter sound identification	6.53	9.55	3.02*
Syllable identification	12.95	16.07	3.13
Non-word reading	4.84	6.42	1.58
Oral reading fluency	6.94	9.08	2.15
Reading comprehension	0.73	0.88	0.15
English listening comprehension	0.57	0.83	0.26**
English vocabulary	7.58	9.16	1.58***

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.16	2.24	0.08	1.93	2.26	0.33
Letter sound identification	6.38	8.82	2.43	6.68	10.15	3.47**
Syllable identification	12.03	13.57	1.54	13.91	18.10	4.19*
Non- word reading	4.44	5.52	1.08	5.26	7.14	1.88*
Oral reading fluency	6.09	7.92	1.83	7.83	10.03	2.20
Reading comprehension	0.65	0.76	0.11	0.80	0.97	0.17
English listening comprehension	0.56	0.81	0.25*	0.58	0.85	0.27*
English vocabulary	7.65	8.96	1.31***	7.50	9.32	1.82***
SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		

	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	2.03	2.15	0.11	2.05	2.26	0.21
Letter sound identification	5.30	8.87	3.57	6.73	9.60	2.87*
Syllable identification	11.33	13.39	2.06	13.22	16.28	3.06
Non-word reading	3.94	5.32	1.38	4.99	6.50	1.51
Oral reading fluency	6.23	7.67	1.43	7.06	9.20	2.14
Reading comprehension	0.72	0.77	0.05	0.73	0.89	0.16
English listening comprehension	0.50	0.79	0.28	0.58	0.84	0.25*
English vocabulary	7.36	9.33	1.96	7.62	9.15	1.53***

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A12: EGRA SUBTASK MEAN SCORES BY PROVINCE

SUBTASK	EASTERN	MUCHINGA	NORTH WESTERN	SOUTHERN	WESTERN
Listening comprehension	1.91	1.49	2.39	2.27	1.97
Letter sound identification	8.22	8.66	5.55	7.86	6.46
Syllable identification	11.92	9.23	9.80	9.61	11.98
Non-word reading	4.58	5.61	4.23	4.31	4.60
Oral reading	8.15	5.23	5.43	4.81	6.71
Reading comprehension	0.62	0.51	0.55	0.50	0.65
English vocabulary	6.91	6.72	7.77	8.75	7.68
English listening comprehension	0.59	0.54	0.86	1.13	0.55

Note: Results calculated without survey weights

TABLE A13: EGRA SUBTASK ZERO SCORES BY LANGUAGE

SUBTASK	ALL	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUVALE	SILOZI
Listening comprehension	18%	9%	25%	13%	11%	10%	8%	18%
Letter sound identification	39%	47%	38%	31%	49%	41%	41%	30%
Syllable identification	51%	55%	54%	49%	53%	60%	33%	36%
Non-word reading	66%	68%	70%	61%	71%	64%	59%	56%
Oral reading fluency	64%	74%	61%	63%	75%	64%	56%	53%
Reading comprehension	72%	77%	76%	73%	82%	73%	68%	50%
English vocabulary	0%	0%	0%	0%	0%	0%	0%	0%
English listening comprehension	46%	36%	49%	57%	24%	59%	43%	54%

TABLE A14: EGRA SUBTASK ZERO SCORES BY LANGUAGE AND LEARNER'S GENDER

SUBTASK	CHITONGA			CINYANJA		
	GIRLS	BOYS	DIFFERENCE	GIRLS	BOYS	DIFFERENCE
Listening comprehension	11%	7%	-4% points ***	30%	20%	-10% points ***
Letter sound identification	45%	50%	5% points *	38%	38%	0% points
Syllable identification	52%	59%	7% points *	52%	55%	2% points
Non-word reading	65%	71%	6% points *	72%	67%	-5% points
Oral reading fluency	71%	76%	4% points *	62%	60%	-3% points
Reading comprehension	74%	79%	5% points *	77%	73%	-4% points
English vocabulary	0%	0%	0% points	1%	0%	-1% points
English listening comprehension	36%	37%	2% points	51%	46%	-5% points

SUBTASK	ICIBEMBA			KIIKAONDE		
	GIRLS	BOYS	DIFFERENCE	GIRLS	BOYS	DIFFERENCE
Listening comprehension	16%	11%	-4% points	12%	10%	-2% points
Letter sound identification	33%	29%	-5% points	48%	51%	3% points
Syllable identification	47%	51%	4% points	54%	52%	-2% points
Non-word reading	58%	64%	6% points	74%	68%	-6% points
Oral reading fluency	61%	65%	4% points	78%	72%	-6% points
Reading comprehension	71%	75%	5% points	83%	80%	-2% points
English vocabulary	0%	1%	0% points	0%	0%	0% points
English listening comprehension	52%	61%	9% points	25%	24%	-1% points

SUBTASK	LUNDA			LUVALE		
	GIRLS	BOYS	DIFFERENCE	GIRLS	BOYS	DIFFERENCE
Listening comprehension	11%	9%	-3% points	12%	4%	-7% points ***
Letter sound identification	44%	38%	-6% points	41%	42%	1% points
Syllable identification	65%	55%	-10% points *	32%	35%	2% points
Non-word reading	68%	60%	-8% points	60%	59%	-1% points
Oral reading fluency	68%	60%	-8% points	58%	54%	-4% points
Reading comprehension	77%	68%	-9% points	68%	68%	1% points
English vocabulary	0%	0%	0% points	0%	0%	0% points
English listening comprehension	60%	58%	-1% points	43%	42%	-1% points

SUBTASK	SILOZI		
	GIRLS	BOYS	DIFFERENCE
Listening comprehension	20%	17%	-3% Points
Letter sound identification	30%	29%	-1% points
Syllable identification	34%	39%	4% points
Non-word reading	54%	58%	5% points
Oral reading fluency	50%	56%	6% points **
Reading comprehension	45%	56%	10% points ***
English vocabulary	0%	0%	0% points
English listening comprehension	52%	56%	4% points

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A15: EGRA SUBTASK ZERO SCORES BY SCHOOL TYPE

SUBTASK	CHITONGA			CINYANJA		
	COMMUNITY	GRZ	DIFFERENCE	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	11%	8%	-3% points	37%	24%	-13% points
Letter sound identification	52%	46%	-6% points	47%	37%	-11% points
Syllable identification	63%	53%	-10% points	61%	52%	-9% points
Non-word reading	73%	67%	-6% points	72%	70%	-2% points
Oral reading fluency	78%	73%	-5% points	65%	61%	-4% points
Reading comprehension	82%	75%	-6% points	79%	75%	-4% points
English vocabulary	0%	0%	-0% points*	1%	0%	-1% points*
English listening comprehension	40%	36%	-4% points	62%	47%	-15% points*

SUBTASK	ICIBEMBA			KIIKAONDE		
	COMMUNITY	GRZ	DIFFERENCE	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	25%	11%	-14% points***	8%	12%	4% points
Letter sound identification	44%	28%	-16% points*	35%	52%	18% points***
Syllable identification	75%	44%	-31% points***	36%	57%	21% points***
Non- word reading	82%	56%	-26% points*	73%	71%	-2% points
Oral reading fluency	86%	58%	-28% points**	81%	74%	-7% points*
Reading comprehension	89%	70%	-19% points*	88%	80%	-8% points*
English vocabulary	1%	0%	-1% points	0%	0%	0% points
English listening comprehension	69%	54%	-15% points	13%	27%	13% points*

SUBTASK	LUNDA			LUVALE		
	COMMUNITY	GRZ	DIFFERENCE	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	11%	8%	-3% points	10%	8%	-3% points
Letter sound identification	45%	32%	-12% points	46%	41%	-5% points
Syllable identification	63%	52%	-11% points	43%	32%	-11% points
Non-word reading	68%	55%	-13% points	68%	58%	-9% points
Oral reading fluency	68%	55%	-13% points	65%	55%	-10% points
Reading comprehension	76%	64%	-12% points	72%	67%	-5% points
English vocabulary	0%	0%	0% points	1%	0%	-1% point
English listening comprehension	61%	54%	-7% points	51%	42%	-9% points

SUBTASK	SILOZI		
	COMMUNITY	GRZ	DIFFERENCE
Listening comprehension	24%	18%	-7% points
Letter sound identification	41%	28%	-13% points**
Syllable identification	50%	35%	-15% points*
Non-word reading	62%	55%	-7% points
Oral reading fluency	61%	52%	-9% points
Reading comprehension	54%	50%	-4% points
English vocabulary	1%	0%	0% points
English listening comprehension	58%	54%	-4% points

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A16: ZERO SCORES OF LEARNERS THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS		
	NO	YES	DIFFERENCE
Listening comprehension	21%	14%	-7% pts***
Letter sound identification	39%	39%	0% pts
Syllable identification	52%	50%	-2% pts
Non-word reading	68%	64%	-4% pts
Oral reading fluency	64%	64%	-1% pts
Reading comprehension	73%	71%	-2% pts
English listening comprehension	51%	40%	-11% pts***
English vocabulary	1%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	16%	12%	-5% pts*	26%	15%	-10% pts***
Letter sound identification	37%	42%	5% pts	42%	36%	-6% pts*
Syllable identification	51%	55%	4% pts	53%	45%	-8% pts*
Non- word reading	66%	67%	2% pts	70%	61%	-9% pts**
Oral reading fluency	63%	66%	3% pts	66%	62%	-4% pts
Reading comprehension	71%	75%	4% pts	74%	68%	-7% pts*
English listening comprehension	49%	42%	-7% pts*	53%	38%	-14% pts***
English vocabulary	0%	0%	0% pts	1%	0%	-1% pts*

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	27%	16%	-11% pts*	20%	13%	-6% pts**
Letter sound identification	49%	44%	-5% pts	37%	38%	1% pts
Syllable identification	60%	60%	0% pts	50%	48%	-2% pts
Non-word reading	72%	71%	-1% pts	67%	63%	-4% pts
Oral reading fluency	73%	70%	-2% pts	63%	63%	0% pts
Reading comprehension	79%	78%	-1% pts	71%	70%	-1% pts
English listening comprehension	56%	44%	-12% pts**	50%	40%	-10% pts***
English vocabulary	1%	0%	-1% pts	0%	0%	0% pts

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A17: ZERO SCORES OF LEARNERS IN CHITONGA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN CHITONGA		
	NO	YES	DIFFERENCE
Listening comprehension	13%	7%	-5% pts*
Letter sound identification	54%	44%	-9% pts**
Syllable identification	59%	53%	-6% pts
Non-word reading	72%	66%	-6% pts
Oral reading fluency	77%	72%	-4% pts
Reading comprehension	80%	75%	-5% pts
English listening comprehension	41%	35%	-6% pts*
English vocabulary	0%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	11%	5%	-6% pts**	14%	9%	-5% pts
Letter sound identification	54%	47%	-6% pts	54%	42%	-12% pts**
Syllable identification	60%	58%	-3% pts	58%	49%	-8% pts
Non- word reading	74%	70%	-4% pts	69%	63%	-7% pts
Oral reading fluency	78%	75%	-2% pts	75%	70%	-6% pts
Reading comprehension	82%	78%	-4% pts	78%	73%	-5% pts
English listening comprehension	44%	34%	-10% pts*	37%	35%	-2% pts
English vocabulary	0%	0%	0% pts	1%	0%	-1% pts

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	15%	8%	-7% pts*	11%	7%	-4% pts
Letter sound identification	57%	48%	-8% pts	53%	44%	-9% pts*
Syllable identification	62%	63%	0% pts	58%	51%	-6% pts
Non-word reading	74%	72%	-2% pts	71%	65%	-6% pts
Oral reading fluency	78%	77%	-1% pts	76%	71%	-4% pts
Reading comprehension	83%	80%	-3% pts	78%	74%	-4% pts
English listening comprehension	43%	37%	-6% pts	40%	34%	-6% pts
English vocabulary	0%	0%	0% pts	0%	0%	0% pts

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

TABLE A18: ZERO SCORES OF LEARNERS IN CINYANJA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN CINYANJA		
	NO	YES	DIFFERENCE
Listening comprehension	28%	22%	-6% pts
Letter sound identification	37%	40%	3% pts
Syllable identification	54%	53%	-1% pts
Non-word reading	71%	68%	-3% pts

Oral reading fluency	62%	61%	-1% pts
Reading comprehension	76%	74%	-2% pts
English listening comprehension	50%	47%	-4% pts
English vocabulary	1%	0%	-1% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	20%	20%	0% pts	35%	23%	-12% pts
Letter sound identification	33%	45%	12% pts*	41%	35%	-6% pts
Syllable identification	51%	61%	10% pts	57%	46%	-11% pts
Non- word reading	65%	71%	6% pts	77%	65%	-12% pts
Oral reading fluency	58%	63%	5% pts	65%	60%	-5% pts
Reading comprehension	70%	79%	8% pts	82%	71%	-11% pts
English listening comprehension	44%	50%	7% pts	57%	43%	-13% pts*
English vocabulary	0%	0%	0% pts	1%	0%	-1% pts

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	40%	29%	-11% pts	26%	21%	-5% pts
Letter sound identification	49%	42%	-7% pts	35%	40%	5% pts
Syllable identification	61%	64%	3% pts	53%	52%	-1% pts
Non-word reading	71%	72%	1% pts	71%	67%	-3% pts
Oral reading fluency	67%	61%	-6% pts	61%	61%	0% pts
Reading comprehension	80%	77%	-3% pts	75%	74%	-1% pts
English listening comprehension	63%	60%	-3% pts	48%	45%	-3% pts
English vocabulary	1%	0%	-1% pts	1%	0%	-1% pts

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A19: ZERO SCORES OF LEARNERS IN ICIBEMBA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN ICIBEMBA		
	NO	YES	DIFFERENCE
Listening comprehension	13%	14%	0% pts
Letter sound identification	34%	24%	-9% pts**
Syllable identification	53%	39%	-14% pts**
Non-word reading	66%	49%	-17% pts***
Oral reading fluency	69%	48%	-20% pts***
Reading comprehension	78%	61%	-16% pts***
English listening comprehension	63%	42%	-21% pts***
English vocabulary	0%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	10%	15%	5% pts	17%	13%	-4% pts

Letter sound identification	30%	24%	-6% pts	37%	24%	-13% pts**
Syllable identification	53%	46%	-6% pts	54%	34%	-20% pts***
Non- word reading	67%	56%	-11% pts	65%	43%	-22% pts***
Oral reading fluency	67%	57%	-11% pts*	70%	42%	-28% pts***
Reading comprehension	77%	70%	-8% pts	78%	55%	-23% pts***
English listening comprehension	64%	52%	-12% pts*	61%	34%	-27% pts***
English vocabulary	1%	0%	-1% pts	0%	0%	0% pts

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	26%	24%	-2% pts	11%	12%	1% pts
Letter sound identification	46%	39%	-7% pts	31%	21%	-10% pts**
Syllable identification	77%	69%	-8% pts	48%	33%	-15% pts***
Non-word reading	85%	74%	-11% pts*	62%	44%	-18% pts***
Oral reading fluency	90%	74%	-16% pts	64%	43%	-20% pts***
Reading comprehension	92%	80%	-12% pts	75%	57%	-17% pts***
English listening comprehension	73%	58%	-15% pts**	61%	39%	-22% pts***
English vocabulary	2%	0%	-2% pts	0%	0%	0% pts

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A20: ZERO SCORES OF LEARNERS IN KIIKAONDE THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN KIIKAONDE		
	NO	YES	DIFFERENCE
Listening comprehension	12%	10%	-2% pts
Letter sound identification	52%	44%	-8% pts*
Syllable identification	55%	51%	-4% pts
Non-word reading	70%	74%	4% pts
Oral reading fluency	75%	74%	-1% pts
Reading comprehension	81%	82%	1% pts
English listening comprehension	30%	16%	-13% pts***
English vocabulary	0%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	12%	7%	-5% pts	12%	13%	0% pts
Letter sound identification	55%	42%	-13% pts***	49%	46%	-3% pts
Syllable identification	55%	48%	-7% pts	55%	53%	-1% pts
Non- word reading	69%	67%	-3% pts	70%	80%	10% pts*
Oral reading fluency	74%	67%	-7% pts*	76%	81%	5% pts
Reading comprehension	82%	78%	-3% pts	81%	86%	5% pts
English listening comprehension	28%	17%	-11% pts**	31%	15%	-16% pts***
English vocabulary	0%	0%	0% pts	0%	0%	0% pts

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	9%	7%	-2% pts	13%	11%	-2% pts
Letter sound identification	40%	26%	-13% pts	55%	48%	-7% pts
Syllable identification	41%	26%	-16% pts	58%	56%	-2% pts
Non-word reading	74%	70%	-5% pts	69%	75%	6% pts
Oral reading fluency	87%	70%	-18% pts*	72%	76%	3% pts
Reading comprehension	90%	84%	-6% pts	79%	82%	2% pts
English listening comprehension	18%	5%	-13% pts	32%	18%	-14% pts***
English vocabulary	0%	0%	0% pts	0%	0%	0% pts

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A21: ZERO SCORES OF LEARNERS IN LUNDA THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN LUNDA		
	NO	YES	DIFFERENCE
Listening comprehension	10%	11%	1% pts
Letter sound identification	40%	43%	3% pts
Syllable identification	60%	60%	-1% pts
Non-word reading	64%	64%	0% pts
Oral reading fluency	65%	64%	-1% pts
Reading comprehension	73%	73%	1% pts
English listening comprehension	61%	54%	-7% pts
English vocabulary	0%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	8%	9%	1% pts	11%	13%	2% pts
Letter sound identification	35%	46%	11% pts	46%	40%	-5% pts
Syllable identification	55%	56%	1% pts	65%	63%	-2% pts
Non- word reading	58%	65%	7% pts	70%	64%	-7% pts
Oral reading fluency	58%	65%	6% pts	71%	63%	-9% pts
Reading comprehension	65%	74%	9% pts	79%	73%	-7% pts
English listening comprehension	60%	56%	-4% pts	63%	53%	-10% pts
English vocabulary	0%	0%	0% pts	0%	0%	0% pts

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	14%	17%	3% pts	8%	10%	2% pts
Letter sound identification	54%	43%	-11% pts	35%	43%	8% pts
Syllable identification	68%	56%	-11% pts	58%	60%	3% pts
Non-word reading	72%	63%	-9% pts	61%	65%	3% pts
Oral reading fluency	74%	63%	-11% pts	61%	64%	2% pts

Reading comprehension	83%	73%	-11% pts	69%	74%	5% pts
English listening comprehension	60%	64%	4% pts	62%	52%	-9% pts
English vocabulary	0%	0%	0% pts	0%	0%	0% pts

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A22: ZERO SCORES OF LEARNERS IN LUVALE THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN LUVALE		
	NO	YES	DIFFERENCE
Listening comprehension	8%	9%	1% pts
Letter sound identification	45%	31%	-14% pts**
Syllable identification	35%	28%	-7% pts
Non-word reading	62%	52%	-10% pts
Oral reading fluency	59%	47%	-12% pts*
Reading comprehension	69%	64%	-6% pts
English listening comprehension	47%	32%	-15% pts**
English vocabulary	0%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	4%	4%	0% pts	11%	13%	2% pts
Letter sound identification	45%	30%	-15% pts**	45%	31%	-14% pts
Syllable identification	35%	32%	-3% pts	35%	25%	-10% pts
Non- word reading	61%	54%	-7% pts	63%	50%	-13% pts
Oral reading fluency	56%	49%	-7% pts	62%	46%	-17% pts*
Reading comprehension	68%	69%	0% pts	71%	60%	-11% pts
English listening comprehension	45%	34%	-11% pts*	48%	30%	-18% pts*
English vocabulary	0%	0%	0% pts	0%	0%	0% pts

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	7%	26%	19% pts*	8%	7%	0% pts
Letter sound identification	46%	44%	-3% pts	45%	30%	-15% pts**
Syllable identification	42%	48%	6% pts	34%	27%	-7% pts
Non-word reading	67%	68%	1% pts	61%	50%	-11% pts
Oral reading fluency	66%	59%	-6% pts	58%	46%	-12% pts*
Reading comprehension	72%	73%	1% pts	69%	63%	-6% pts
English listening comprehension	52%	49%	-3% pts	46%	31%	-15% pts**
English vocabulary	1%	0%	-1% pts	0%	0%	0% pts

* p < 0.05 ** p < 0.01 *** p < 0.001

TABLE A23: ZERO SCORES OF LEARNERS IN SILOZI THAT ATTENDED ECE BY GENDER AND SCHOOL TYPE

SUBTASK	ALL LEARNERS IN SILOZI		
	NO	YES	DIFFERENCE
Listening comprehension	20%	15%	-4% pts
Letter sound identification	33%	23%	-11% pts **
Syllable identification	39%	31%	-8% pts
Non-word reading	59%	50%	-9% pts
Oral reading fluency	57%	45%	-12% pts***
Reading comprehension	53%	46%	-7% pts
English listening comprehension	57%	48%	-9% pts*
English vocabulary	1%	0%	0% pts

SUBTASK	BOYS			GIRLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	19%	13%	-6% pts	21%	18%	-3% pts
Letter sound identification	32%	23%	-9% pts***	35%	22%	-12% pts*
Syllable identification	41%	32%	-10% pts	36%	31%	-5% pts
Non- word reading	61%	53%	-8% pts	57%	48%	-9% pts
Oral reading fluency	60%	49%	-11% pts*	54%	43%	-12% pts**
Reading comprehension	57%	52%	-5% pts	48%	41%	-7% pts
English listening comprehension	59%	50%	-9% pts	56%	46%	-9% pts*
English vocabulary	0%	0%	0% pts	1%	0%	-1% pts*

SUBTASK	COMMUNITY SCHOOLS			GRZ SCHOOLS		
	NO	YES	DIFFERENCE	NO	YES	DIFFERENCE
Listening comprehension	25%	21%	-4% pts	19%	15%	-4% pts
Letter sound identification	42%	36%	-6% pts	32%	21%	-10% pts**
Syllable identification	51%	44%	-7% pts	37%	30%	-6% pts
Non-word reading	63%	57%	-6% pts	58%	49%	-9% pts
Oral reading fluency	63%	56%	-6% pts	56%	45%	-12% pts***
Reading comprehension	54%	54%	0% pts	52%	46%	-7% pts
English listening comprehension	61%	48%	-12% pts	57%	48%	-9% pts*
English vocabulary	1%	0%	-1% pts	0%	0%	0% pts

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

TABLE A24: EGRA ZERO SCORES BY PROVINCE

SUBTASK	EASTERN	MUCHINGA	NORTH WESTERN	SOUTHERN	WESTERN
Listening comprehension	20%	26%	12%	12%	21%
Letter sound identification	28%	29%	45%	41%	36%
Syllable identification	43%	47%	52%	51%	45%
Non-word reading	61%	62%	66%	65%	61%
Oral reading	51%	62%	66%	72%	59%
Reading comprehension	70%	75%	74%	76%	59%
English vocabulary	0%	0%	0%	0%	1%

English listening comprehension	57%	60%	47%	38%	60%

Note: Results calculated without survey weight

ANNEX 2: USAID/EDUCATION DATA ACTIVITY 2018 BASELINE EGRA RESULTS BY 2015 MOGE BENCHMARKS

Funded by USAID, and implemented by RTI International, a benchmark setting workshop was held in July 2015 with MoGE and other education stakeholders. The performance category benchmarks set in 2015 (Brombacher, Bulat, King, Kochetkova, & Nordstrum, 2015; RTI International, 2015) were recently used by EnCompass for its evaluation of TTL in 2017 (Falconer-Stout, Frischkorn, & Franco, 2017). The categories and the benchmarks apply uniformly across all languages. Table A39 defines the performance category labels and their benchmarks for oral reading fluency.

TABLE A25: PERFORMANCE CATEGORIES BY MOGE BENCHMARKS

CATEGORY	NON-WORD READING (CNONWPM)	ORAL READING FLEUNCY (CWPM)	READING COMPREHENSION QUESTIONS CORRECT
Non-reader	0	0	0
Pre-Emergent	1 – 14	1 - 19	1
Emergent	15 - 29	20 - 44	2 – 3
Proficient	30+	45+	4 – 5

Table A26 show the results for performance categories for each of the MoGE benchmarks disaggregated by gender and school type. Generally, the learners in GRZ schools performed best because they have the lowest share of non-readers and larger shares of other performance categories relative to learners in community schools.

TABLE A26: ORAL READING FLUENCY PERFORMANCE CATEGORIES BY LEARNER'S GENDER AND SCHOOL TYPE

NON-WORD READING (ALL LANGUAGES)

CATEGORY		GENDER		SCHOOL TYPE	
	OVERALL	BOYS	GIRLS	GRZ	COMMUNITY
Non-reader	66%	66%	66%	65%	72%
Pre-emergent	21%	22%	20%	21%	20%
Emergent	12%	11%	13%	13%	8%
Proficient	1%	1%	1%	1%	0%

ORAL READING FLUENCY (ALL LANUAGES)

CATEGORY		GENDER		SCHOOL TYPE	
	OVERALL	BOYS	GIRLS	GRZ	COMMUNITY
Non-reader	64%	65%	64%	63%	72%
Pre-emergent	23%	24%	22%	23%	18%
Emergent	13%	11%	14%	13%	10%
Proficient	1%	1%	1%	1%	0%

READING COMPREHENSION (ALL LANUAGES)

CATEGORY	OVERALL	GENDER	SCHOOL TYPE

		BOYS	GIRLS	GRZ	COMMUNITY
Non-reader	72%	73%	71%	71%	78%
Pre-emergent	13%	13%	13%	14%	8%
Emergent	13%	13%	13%	13%	12%
Proficient	2%	2%	3%	2%	2%

Table A27 and Figure A1 shows the learner performance in each language according to the existing oral reading fluency benchmarks. Overall, very few learners in any language achieved the oral reading fluency proficiency benchmark of 45 CWPM. In each language the share of proficient learners is 0 percent or 1 percent. Emergent readers comprise the second smallest group in any language between 6 percent and 17 percent. Non-readers, i.e. learners that cannot read one word, are the largest group ranging from 53 percent in Silozi to 75 percent in Kiikaonde.

TABLE A27: ORAL READING FLUENCY PERFORMANCE CATEGORIES BY LANGUAGE

CATEGORY	CHITONGA	CINYANJA	ICIBEMBA	KIIKAONDE	LUNDA	LUVALE	SILOZI
Proficient	0%	1%	0%	1%	0%	1%	1%
Emergent	10%	14%	12%	6%	10%	17%	17%
Pre-Emergent	17%	24%	26%	18%	25%	26%	29%
Non-reader	74%	61%	63%	75%	64%	56%	53%

FIGURE A1: ORAL READING FLUENCY PERFORMANCE CATEGORIES BY LANGUAGE

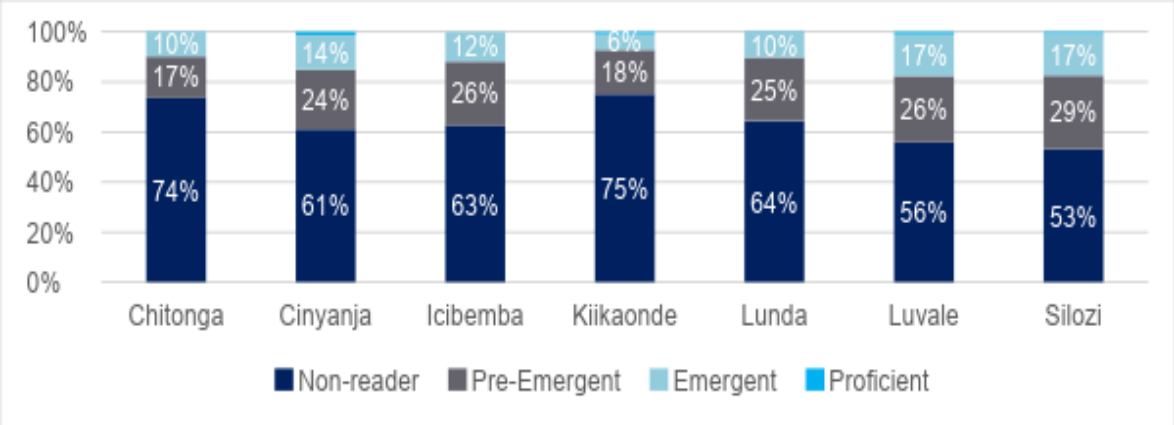


Table A28 and Figure A2 shows the learner performance in oral reading performance standards disaggregated by boys and girls for each language. In Chitonga, Icibemba, and Silozi girls appear to perform better than the boys. Girls tend to have a lower share of non-readers and higher share of emergent readers. For the other four languages, boys appear to perform better than the girls. The boys have a

smaller share of non-readers and larger share of pre-emergent readers in Cinyanja, Kiikaonde, Lunda, and Luvale.

TABLE A28: ORAL READING FLUENCY PERFORMANCE CATEGORIES BY LANGUAGE AND LEARNER'S GENDER

CATEGORY	CHITONGA		CINYANJA		ICIBEMBA		KIIKAONDE	
	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS
Proficient	0%	0%	1%	1%	0%	0%	0%	1%
Emergent	12%	8%	14%	13%	14%	9%	7%	5%
Pre-Emergent	17%	16%	22%	26%	25%	26%	14%	21%
Non-reader	71%	76%	62%	60%	61%	65%	78%	72%

CATEGORY	LUNDA		LUVALE		SILOZI	
	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS
Proficient	0%	1%	1%	1%	1%	1%
Emergent	6%	14%	17%	16%	20%	14%
Pre-Emergent	25%	25%	25%	28%	29%	29%
Non-reader	68%	60%	58%	54%	50%	56%

FIGURE A2: ORAL READING FLUENCY PERFORMANCE CATEGORIES BY LANGUAGE AND LEARNER'S GENDER

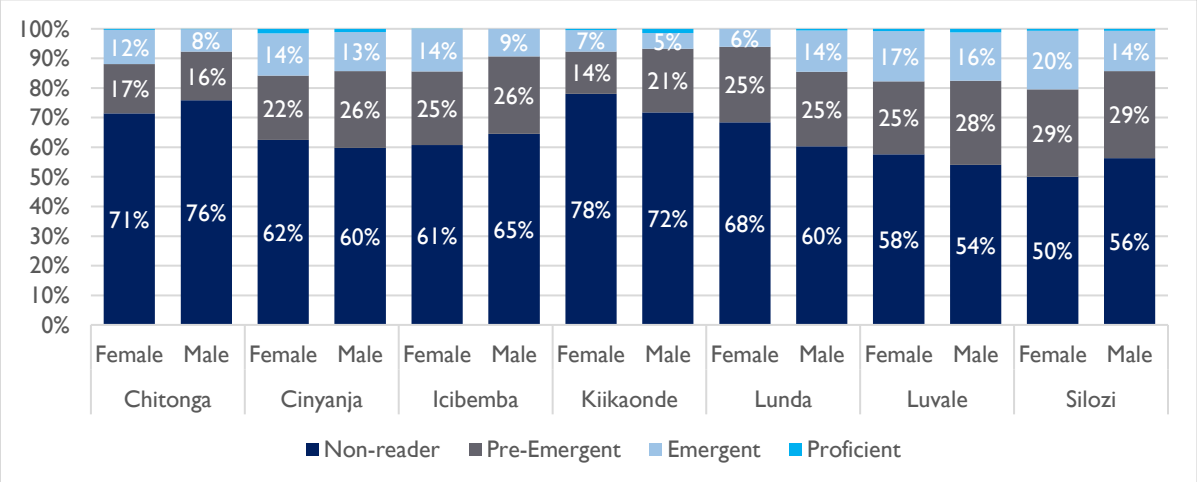


Table A29 shows the learner performance in oral reading performance standards by provinces.

TABLE A29: ORAL READING FLUENCY PERFORMANCE CATEGORIES BY PROVINCE

SUBTASK	EASTERN	MUCHINGA	NORTH WESTERN	SOUTHERN	WESTERN
Non-reader	51%	62%	66%	72%	59%
Pre-emergent	30%	28%	23%	17%	26%
Emergent	18%	10%	11%	11%	14%
Proficient	1%	0%	1%	0%	1%

Note: Results calculated without survey weights

ANNEX 3: DISTRICT LEVEL EGRA RESULTS

TABLE A30: CHITONGA LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Chikankata	1.84	10.76	10.98	4.39	5.25	0.40	7.82	0.66
Choma	2.30	4.64	5.91	3.14	3.78	0.35	7.37	0.82
Gwembe	2.24	3.88	4.76	1.83	1.98	0.18	7.98	0.60
Kalomo	2.52	2.86	5.43	2.16	2.20	0.29	8.07	0.89
Kazungula	2.41	9.18	13.48	5.58	6.66	0.66	8.41	1.01
Livingstone	1.15	11.64	9.57	4.00	4.08	0.34	14.01	2.47
Mazabuka	1.73	6.26	7.62	3.16	3.28	0.31	9.00	0.90
Monze	2.01	4.41	7.53	3.17	3.27	0.34	8.33	1.17
Namwala	2.98	11.51	12.99	6.86	7.90	0.97	10.25	2.74
Pemba	2.17	6.48	5.95	2.16	2.17	0.19	7.12	0.40
Siavonga	2.26	11.88	13.30	5.84	7.55	0.76	9.14	1.42
Sinazongwe	2.86	9.62	12.32	5.63	6.67	0.72	9.72	1.27
Zimba	3.18	14.47	19.06	10.25	11.63	1.47	10.37	1.37

TABLE A31: CINYANJA LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Chadiza	1.98	9.27	15.73	5.87	11.18	0.93	6.46	0.49
Chama	0.89	8.13	12.59	4.51	7.87	0.42	7.50	0.77
Chipata	2.08	5.61	9.95	3.73	6.53	0.47	7.82	0.90
Katete	2.91	8.66	13.19	5.18	9.35	0.88	7.80	0.97
Lundazi	0.95	6.04	7.35	2.69	4.63	0.33	6.98	0.50
Mambwe	2.06	8.58	14.09	5.81	8.55	0.63	7.38	0.52
Nyimba	1.66	7.17	13.55	5.14	10.48	0.81	6.84	0.52
Petauke	2.09	9.90	12.96	5.20	8.43	0.55	7.74	0.83
Sinda	1.90	10.76	14.84	6.11	10.52	0.77	6.52	0.41
Vubwi	1.63	7.09	7.00	2.12	4.94	0.32	5.39	0.32

TABLE A32: ICIBEMBA LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Chinsali	1.90	7.60	11.16	7.18	6.51	0.85	5.45	0.36
Isoka	1.46	10.45	8.69	6.44	6.03	0.53	6.79	0.57
Mafinga	0.91	8.84	8.07	5.78	4.50	0.48	7.00	0.65
Mpika	2.36	7.44	9.92	6.65	5.54	0.63	6.82	0.76
Nakonde	1.23	10.45	9.05	5.83	4.31	0.42	7.31	0.46
Shiwangandu	1.80	8.88	7.11	4.69	3.42	0.39	6.26	0.27

TABLE A33: KIIKAONDE LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Kalumbila	2.78	4.93	7.16	2.28	3.37	0.41	9.37	1.32
Kasempa	3.69	8.56	16.62	5.92	9.37	1.02	9.84	1.32
Mufumbwe	2.05	8.13	9.87	3.69	4.45	0.43	6.42	0.89
Mushindamo	2.52	6.60	9.48	3.78	4.98	0.40	7.54	0.63
Solwezi	3.14	5.99	7.15	2.43	2.78	0.29	11.09	2.00

TABLE A34: LUNDA LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Ikelenge	2.21	6.64	7.34	4.49	4.71	0.56	7.14	0.62
Kambompo	2.50	6.16	9.38	5.17	5.54	0.57	7.12	0.53
Manyinga	1.78	4.28	7.65	4.99	4.94	0.55	6.20	0.32
Mwinilunga	2.42	6.20	7.86	4.94	5.29	0.60	7.07	0.52
Zambezi	2.23	3.50	6.06	3.95	4.60	0.49	8.71	1.13

TABLE A35: LUVALE LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Chavuma	2.76	5.66	19.23	6.98	10.20	1.01	7.71	0.98
Kabompo	2.16	5.36	13.63	4.89	7.23	0.55	7.54	1.01
Manyinga	2.04	4.89	12.74	4.74	7.08	0.63	8.27	1.15
Zambezi	1.75	3.52	7.81	3.01	3.64	0.34	7.40	0.30

TABLE A36: SILOZI LOI DISTRICT MEAN SCORES

DISTRICT	LISTENING COMPREHENSION	LETTER SOUNDS	SYLLABLE SOUNDS	NON-WORD READING	ORAL READING	READING COMPREHENSION	ENGLISH VOCABULARY	ENGLISH LISTENING COMPREHENSION
Kalabo	2.13	8.72	15.79	5.96	8.22	0.90	8.16	0.63
Kaoma	1.76	5.13	10.74	4.02	6.00	0.58	8.32	0.74
Limulunga	1.68	5.29	8.80	3.02	4.76	0.42	7.00	0.25
Luampa	1.68	6.52	13.09	5.14	7.96	0.86	7.47	0.46
Lukulu	1.33	6.33	12.67	4.59	6.46	0.52	7.33	0.58
Mitete	1.35	3.13	5.30	1.74	2.63	0.21	5.88	0.22
Mongu	2.85	7.54	16.51	6.15	9.12	0.96	9.11	1.13
Mulobezi	1.99	10.33	12.27	4.79	6.00	0.62	9.12	0.90
Mwandi	2.42	6.82	11.20	4.66	6.63	0.57	9.16	0.78
Nkeyema	1.94	6.10	10.20	3.95	5.50	0.53	7.86	0.54
Senanga	3.10	9.39	17.60	7.79	11.06	1.03	8.87	0.63
Sesheke	2.86	12.57	20.09	8.21	12.15	1.19	9.13	0.80
Shangombo	1.64	7.05	15.85	6.70	10.22	0.84	7.11	0.50
Sikongo	1.70	5.58	10.60	3.94	6.15	0.75	6.85	0.41
Sioma	1.71	4.74	8.50	2.83	4.15	0.29	6.13	0.30

ANNEX 4: COMPLETE DESCRIPTIVE RESULTS FOR LEARNER QUESTIONNAIRE

QUESTION	RESPONSE OPTION	CHITONGA		CINYANJA		ICIBEMBA		KIIKAONDE	
		% OF LEARNERS	N	% OF LEARNERS	N	% OF LEARNERS	N	% OF LEARNERS	N
Learner's gender	Female	50%	1480	51%	1407	51%	847	51%	827
	Male	50%	1483	49%	1355	49%	807	49%	805
Learner's age	6 to 8 years old	38%	1135	14%	384	26%	433	32%	522
	9 to 11 years old	57%	1691	62%	1726	66%	1089	61%	989
	12 years or older	5%	137	24%	652	8%	132	7%	121
Teacher is at school today	No	4%	111	7%	200	5%	89	14%	226
	Yes	96%	2849	93%	2561	95%	1564	86%	1404
	Don't know	0%	3	0%	1	0%	1	0%	2
Grade enrolled last year	Grade 1	94%	2777	91%	2524	91%	1505	94%	1526
	Grade 2	5%	151	8%	226	8%	140	6%	104
	Don't know	1%	35	0%	12	1%	9	0%	2
Learner ate before school today	No	38%	1126	36%	992	51%	840	54%	888
	Yes	62%	1833	64%	1763	49%	810	45%	735
	Don't know	0%	4	0%	7	0%	4	1%	9
School has feeding program	No	66%	1964	25%	692	82%	1352	89%	1445
	Yes	33%	988	75%	2070	18%	298	11%	185
	Don't know	0%	11	0%	0	0%	4	0%	2
Learner was absent last week	No	58%	1708	47%	1308	60%	988	66%	1069
	Yes	42%	1241	52%	1448	40%	663	34%	558
	Don't know	0%	14	0%	6	0%	3	0%	5
Learner has local language reader	No	93%	2753	90%	2487	98%	1616	77%	1257
	Yes	7%	207	10%	274	2%	37	23%	372
	Don't know	0%	3	0%	1	0%	1	0%	3

Learner has local language exercise book	No	16%	483	32%	889	21%	355	53%	857
	Yes	83%	2473	68%	1869	79%	1299	47%	771
	Don't know	0%	7	0%	4	0%	0	0%	4
Learner has English reader	No	94%	2785	93%	2572	97%	1609	74%	1203
	Yes	6%	168	7%	185	2%	41	26%	425
	Don't know	0%	10	0%	5	0%	4	0%	4
Number of pages teacher corrected	No pages	7%	211	15%	404	6%	104	9%	153
	One quarter	40%	1193	31%	852	33%	551	31%	502
	Half	23%	674	17%	480	14%	229	31%	510
	Three quarters	10%	302	10%	289	12%	194	18%	293
	All	5%	144	4%	114	16%	267	3%	48
	Exercise book not available	15%	439	23%	623	19%	309	8%	126
Teacher's reaction when learner does well ‡	Nothing	13%	388	9%	259	7%	113	9%	153
	Praises	63%	1878	58%	1606	70%	1163	84%	1371
	Gives prize	20%	587	35%	977	21%	354	3%	57
	Other	1%	34	1%	16	0%	1	0%	7
	Don't know	5%	158	2%	68	5%	83	4%	66
Teacher's reaction when learner is wrong ‡	Explains	9%	263	5%	152	3%	42	4%	58
	Encourages	8%	251	26%	727	20%	335	42%	684
	Asks another learner	12%	351	22%	601	26%	438	2%	37
	Asks again	9%	265	8%	208	5%	76	5%	83
	Corrects	10%	299	15%	420	13%	212	21%	351
	Hits learner	46%	1364	26%	722	21%	352	13%	219
	Other	5%	163	5%	145	8%	139	8%	130
	Don't know	4%	128	3%	93	9%	146	8%	130
Learner read books on own at school today	No	55%	1623	46%	1271	59%	977	77%	1264
	Yes	45%	1324	53%	1477	41%	671	22%	357
	Don't know	1%	16	1%	14	0%	6	1%	11
	No	67%	1992	60%	1650	73%	1201	87%	1426

Learner brought home reading books last week	Yes	32%	944	39%	1090	27%	448	12%	199
	Don't know	1%	27	1%	22	0%	5	0%	7
Teacher reminds learner to use finger when reading	No	19%	562	16%	442	25%	409	21%	339
	Yes	80%	2367	82%	2268	74%	1225	76%	1247
	Don't know	1%	34	2%	52	1%	20	3%	46
Teacher draws pictures to represent new words	No	10%	298	8%	220	14%	231	14%	228
	Yes	89%	2630	90%	2494	84%	1393	84%	1368
	Don't know	1%	35	2%	48	2%	30	2%	36
Teacher tells letter name and sounds	No	12%	364	12%	321	20%	324	15%	239
	Yes	87%	2573	87%	2401	79%	1303	84%	1371
	Don't know	1%	26	1%	40	2%	27	1%	22
Teacher asks learners to write letters with finger	No	19%	549	16%	430	27%	443	21%	336
	Yes	80%	2382	83%	2288	72%	1194	78%	1265
	Don't know	1%	32	2%	44	1%	17	2%	31
Teacher asks learners if they have letter in their name	No	26%	765	20%	551	35%	575	38%	627
	Yes	72%	2135	77%	2131	63%	1034	57%	931
	Don't know	2%	63	3%	80	3%	45	5%	74
Teacher tells learner to put finger space between words	No	13%	385	14%	400	40%	664	13%	219
	Yes	86%	2561	84%	2318	58%	958	86%	1397
	Don't know	1%	17	2%	44	2%	32	1%	16
Teacher tells learner to look at all the letters	No	14%	420	16%	438	31%	513	16%	264
	Yes	84%	2499	83%	2285	67%	1108	81%	1329
	Don't know	1%	44	1%	39	2%	33	2%	39
Language most frequently spoken at home	Icibemba	1%	38	1%	18	52%	853	5%	77
	Cinyanja	5%	143	73%	2012	1%	15	0%	7
	Chitonga	87%	2573	0%	1	0%	6	3%	41
	Kiikaonde	0%	3	0%	0	0%	0	57%	931
	Luvale	0%	12	0%	0	0%	0	6%	102
	Silozi	2%	74	0%	1	0%	0	0%	2

	Lunda	0%	0	0%	0	0%	0	17%	279
	English	1%	27	0%	7	0%	6	1%	10
	Other	2%	65	26%	705	46%	762	11%	179
	Don't know	1%	28	1%	18	1%	12	0%	4
Other languages spoken at home ‡	Icibemba	2%	66	1%	40	59%	984	8%	123
	Cinyanja	10%	291	75%	2081	3%	43	1%	23
	Chitonga	75%	2227	0%	5	0%	6	2%	31
	Kiikaonde	0%	10	0%	1	0%	1	54%	883
	Luvale	1%	17	0%	0	0%	0	7%	111
	Silozi	3%	95	0%	3	0%	1	0%	7
	Lunda	0%	1	0%	0	0%	1	14%	230
	English	5%	147	2%	63	2%	26	4%	67
	Other	4%	123	19%	530	37%	617	11%	173
	Don't know	2%	67	2%	60	1%	22	1%	15
Source of drinking water at home	River, lake, stream	13%	379	11%	308	43%	714	10%	156
	Well or borehole	70%	2070	83%	2300	51%	849	81%	1324
	Communal tap	7%	200	3%	87	4%	67	5%	74
	Water truck/tank	0%	11	0%	0	0%	1	0%	3
	Tap in home	9%	268	2%	65	1%	19	4%	71
	Other	1%	30	0%	2	0%	1	0%	3
	Don't know	0%	5	0%	0	0%	3	0%	1
Learner's home has electricity	No	72%	2133	74%	2050	59%	972	66%	1078
	Yes	28%	827	26%	708	41%	682	34%	553
	Don’t know	0%	3	0%	4	0%	0	0%	1
Location of cooking in learner's home	Outside house	41%	1223	33%	917	31%	508	23%	382
	Shed	39%	1167	21%	578	52%	860	58%	948
	Inside house	19%	572	46%	1263	17%	285	18%	300
	Don't know	0%	1	0%	4	0%	1	0%	2
Type of cooking fuel in learner's home	Firewood	75%	2231	76%	2109	62%	1019	53%	857
	Charcoal burner	19%	565	21%	592	36%	595	43%	696
	Kerosene stove	0%	8	0%	4	0%	3	0%	1

	Gas stove	0%	6	0%	7	0%	0	0%	8
	Electric stove	5%	151	2%	49	2%	36	4%	69
	Other	0%	2	0%	0	0%	0	0%	0
	Don't know	0%	0	0%	1	0%	1	0%	1
Type of toilet in learner's home	No toilet	6%	190	3%	94	0%	6	0%	8
	Pit toilet	85%	2511	92%	2549	97%	1597	90%	1462
	Shared toilet	1%	25	1%	25	0%	6	3%	54
	Communal toilet	0%	7	1%	32	0%	2	0%	4
	Flush toilet outside house	3%	80	1%	23	1%	17	2%	28
	Flush toilet inside house	4%	133	1%	36	2%	26	5%	75
	Other	0%	7	0%	1	0%	0	0%	0
	Don't know	0%	10	0%	2	0%	0	0%	1
Learner's home has radio	No	29%	855	34%	943	38%	622	44%	716
	Yes	71%	2102	66%	1818	62%	1031	56%	913
	Don’t know	0%	6	0%	1	0%	1	0%	3
Learner's home has mobile phone	No	9%	265	13%	358	23%	373	18%	286
	Yes	91%	2697	87%	2402	77%	1281	82%	1345
	Don’t know	0%	1	0%	2	0%	0	0%	1
Learner's home has TV	No	67%	1982	70%	1932	74%	1219	67%	1099
	Yes	33%	978	30%	829	26%	435	33%	531
	Don’t know	0%	3	0%	1	0%	0	0%	2
Learner's home has computer	No	94%	2778	96%	2650	94%	1563	93%	1516
	Yes	6%	170	4%	108	5%	87	7%	113
	Don’t know	1%	15	0%	4	0%	4	0%	3
Learner's home has refrigerator	No	88%	2594	93%	2573	92%	1527	87%	1423
	Yes	12%	367	7%	182	7%	123	13%	205
	Don’t know	0%	2	0%	7	0%	4	0%	4
Learner's home has bicycle	No	29%	846	18%	499	22%	360	24%	392
	Yes	71%	2114	82%	2262	78%	1294	76%	1237
	Don’t know	0%	3	0%	1	0%	0	0%	3
Learner's home has motorbike	No	87%	2589	83%	2293	92%	1516	87%	1418

	Yes	12%	369	17%	469	8%	135	13%	212
	Don't know	0%	5	0%	0	0%	3	0%	2
Learner's home has car/truck	No	88%	2593	91%	2503	94%	1552	86%	1401
	Yes	12%	368	9%	253	6%	100	14%	231
	Don't know	0%	2	0%	6	0%	2	0%	0
Learner's home has cattle/livestock	No	14%	417	12%	321	20%	333	42%	691
	Yes	86%	2544	88%	2440	80%	1321	58%	939
	Don't know	0%	2	0%	1	0%	0	0%	2
Learner has other reading materials at home	No	53%	1557	51%	1395	56%	932	61%	992
	Yes	47%	1387	49%	1357	42%	690	39%	631
	Don't know	1%	19	0%	10	2%	32	1%	9
Frequency learner reads aloud at home	Never	34%	994	43%	1178	38%	632	43%	708
	Sometimes	55%	1623	50%	1379	54%	900	46%	758
	Everyday	10%	292	7%	201	6%	96	10%	156
	Don't know	2%	54	0%	4	2%	26	1%	10
Frequency someone reads to learner at home	Never	31%	926	31%	850	34%	559	38%	628
	Sometimes	57%	1699	61%	1686	60%	993	50%	821
	Everyday	10%	301	8%	224	5%	83	11%	176
	Don't know	1%	37	0%	2	1%	19	0%	7
Learner had homework last week	No	31%	912	34%	939	28%	467	51%	830
	Yes	69%	2039	66%	1815	71%	1182	49%	793
	Don't know	0%	12	0%	8	0%	5	1%	9
Someone at home helps learner with homework	No	37%	1104	21%	585	44%	721	27%	448
	Yes	62%	1844	79%	2173	56%	928	72%	1182
	Don't know	1%	15	0%	4	0%	5	0%	2
Learner's mother is literate	No	13%	378	30%	820	21%	342	19%	308
	Yes	87%	2565	70%	1924	79%	1307	81%	1314
	Don't know	1%	20	1%	18	0%	5	1%	10
Learner's father is literate	No	8%	251	20%	560	12%	191	11%	176
	Yes	90%	2676	79%	2177	87%	1442	88%	1442
	Don't know	1%	36	1%	25	1%	21	1%	14
	No	36%	1071	64%	1771	72%	1183	70%	1145

Learner attended pre-school before Grade 1	Yes	63%	1879	36%	989	28%	470	30%	485
	Don't know	0%	13	0%	2	0%	1	0%	2
Location learner attended pre-school	This school, whole year	56%	1066	46%	458	48%	228	19%	95
	This school, part year	2%	40	4%	35	2%	8	1%	7
	Another school	41%	782	50%	501	50%	238	79%	387

‡ Mark all that apply

QUESTION	RESPONSE OPTION	LUNDA		LUVALE		SILOZI	
		% OF LEARNERS	N	% OF LEARNERS	N	% OF LEARNERS	N
Learner's gender	Female	49%	777	53%	770	52%	1577
	Male	51%	798	47%	695	48%	1443
Learner's age	6 to 8 years old	31%	493	33%	477	34%	1012
	9 to 11 years old	61%	955	59%	870	60%	1798
	12 years or older	8%	127	8%	118	7%	210
Teacher is at school today	No	0%	6	6%	83	5%	160
	Yes	100%	1568	94%	1380	95%	2855
	Don't know	0%	1	0%	2	0%	5
Grade enrolled last year	Grade 1	92%	1452	92%	1355	90%	2729
	Grade 2	8%	119	7%	109	9%	260
	Don't know	0%	4	0%	1	1%	31
Learner ate before school today	No	56%	880	60%	885	43%	1302
	Yes	44%	692	39%	578	56%	1704
	Don't know	0%	3	0%	2	0%	14
School has feeding program	No	51%	796	78%	1138	61%	1831
	Yes	49%	775	22%	324	39%	1185
	Don't know	0%	4	0%	3	0%	4
Learner was absent last week	No	49%	774	62%	913	50%	1500
	Yes	50%	794	37%	548	50%	1504

	Don't know	0%	7	0%	4	1%	16
Learner has local language reader	No	95%	1489	86%	1253	90%	2726
	Yes	5%	86	14%	211	10%	288
	Don't know	0%	0	0%	1	0%	6
Learner has local language exercise book	No	16%	247	22%	317	24%	717
	Yes	84%	1328	78%	1147	76%	2298
	Don't know	0%	0	0%	1	0%	5
Learner has English reader	No	90%	1414	89%	1308	93%	2811
	Yes	10%	156	11%	156	7%	206
	Don't know	0%	5	0%	1	0%	3
Number of pages teacher corrected	No pages	4%	66	10%	142	7%	217
	One quarter	25%	395	30%	446	31%	950
	Half	25%	398	22%	322	18%	532
	Three quarters	16%	258	15%	221	17%	524
	All	19%	297	9%	127	6%	180
	Exercise book not available	10%	161	14%	207	20%	617
Teacher's reaction when learner does well ‡	Nothing	3%	47	7%	99	5%	141
	Praises	89%	1402	79%	1164	81%	2433
	Gives prize	7%	109	11%	163	11%	346
	Other	0%	4	0%	5	0%	7
	Don't know	2%	37	4%	66	6%	186
Teacher's reaction when learner is wrong ‡	Explains	2%	30	3%	49	4%	123
	Encourages	17%	261	18%	270	11%	342
	Asks another learner	11%	179	8%	117	12%	375
	Asks again	7%	111	5%	70	6%	192
	Corrects	31%	484	18%	264	21%	643
	Hits learner	37%	586	40%	591	50%	1521
	Other	4%	60	7%	110	3%	90
	Don't know	2%	34	4%	52	5%	149
	No	68%	1070	77%	1132	76%	2295

Learner read books on own at school today	Yes	31%	496	22%	329	23%	694
	Don't know	1%	9	0%	4	1%	31
Learner brought home reading books last week	No	79%	1239	80%	1168	85%	2553
	Yes	21%	331	20%	297	15%	446
	Don't know	0%	5	0%	0	1%	21
Teacher reminds learner to use finger when reading	No	11%	168	19%	280	22%	664
	Yes	89%	1402	79%	1164	77%	2321
	Don't know	0%	5	1%	21	1%	35
Teacher draws pictures to represent new words	No	9%	139	17%	243	11%	347
	Yes	91%	1427	82%	1203	86%	2593
	Don't know	1%	9	1%	19	3%	80
Teacher tells letter name and sounds	No	6%	99	16%	240	24%	722
	Yes	93%	1471	83%	1216	75%	2256
	Don't know	0%	5	1%	9	1%	42
Teacher asks learners to write letters with finger	No	13%	209	24%	354	19%	584
	Yes	86%	1360	75%	1104	79%	2383
	Don't know	0%	6	0%	7	2%	53
Teacher asks learners if they have letter in their name	No	21%	335	31%	456	44%	1326
	Yes	78%	1226	68%	990	51%	1553
	Don't know	1%	14	1%	19	5%	141
Teacher tells learner to put finger space between words	No	10%	153	11%	166	38%	1155
	Yes	90%	1419	88%	1292	59%	1790
	Don't know	0%	3	0%	7	2%	75
Teacher tells learner to look at all the letters	No	7%	109	12%	179	21%	638
	Yes	93%	1457	87%	1275	77%	2330
	Don't know	1%	9	1%	11	2%	52
Language most frequently spoken at home	Icibemba	0%	7	0%	6	0%	2
	Cinyanja	0%	3	0%	2	0%	8
	Chitonga	0%	0	0%	2	1%	18

	Kiikaonde	1%	15	0%	6	0%	6
	Luvale	7%	111	77%	1134	5%	145
	Silozi	0%	2	0%	7	70%	2126
	Lunda	90%	1423	10%	150	1%	19
	English	1%	8	0%	7	0%	4
	Other	0%	6	10%	150	23%	688
	Don't know	0%	0	0%	1	0%	4
Other languages spoken at home ‡	Icibemba	3%	42	1%	14	0%	1
	Cinyanja	1%	8	0%	6	1%	41
	Chitonga	0%	3	0%	2	1%	21
	Kiikaonde	3%	45	1%	14	0%	7
	Luvale	16%	250	66%	975	8%	228
	Silozi	0%	7	0%	6	68%	2065
	Lunda	74%	1166	13%	194	1%	26
	English	5%	86	3%	38	2%	64
	Other	3%	42	16%	229	23%	698
	Don't know	0%	1	0%	7	0%	15
Source of drinking water at home	River, lake, stream	17%	260	12%	170	13%	407
	Well or borehole	76%	1201	81%	1186	78%	2370
	Communal tap	5%	73	5%	71	6%	167
	Water truck/tank	0%	1	0%	0	0%	1
	Tap in home	2%	34	3%	38	2%	63
	Other	0%	6	0%	0	0%	8
	Don't know	0%	0	0%	0	0%	4
Learner's home has electricity	No	73%	1142	77%	1132	80%	2423
	Yes	27%	430	23%	333	20%	595
	Don’t know	0%	3	0%	0	0%	2
Location of cooking in learner's home	Outside house	29%	453	62%	908	27%	824
	Shed	55%	872	33%	477	68%	2048
	Inside house	16%	249	5%	80	4%	134
	Don't know	0%	1	0%	0	0%	14

Type of cooking fuel in learner's home	Firewood	78%	1221	84%	1227	84%	2525
	Charcoal burner	20%	318	14%	208	15%	441
	Kerosene stove	0%	3	0%	2	0%	2
	Gas stove	0%	2	0%	0	0%	5
	Electric stove	2%	31	2%	28	1%	37
	Other	0%	0	0%	0	0%	0
	Don't know	0%	0	0%	0	0%	10
Type of toilet in learner's home	No toilet	2%	29	3%	42	26%	791
	Pit toilet	93%	1470	93%	1362	70%	2100
	Shared toilet	1%	21	2%	34	3%	81
	Communal toilet	1%	13	0%	7	0%	12
	Flush toilet outside house	1%	14	0%	4	0%	7
	Flush toilet inside house	2%	26	1%	11	1%	22
	Other	0%	1	0%	5	0%	0
	Don't know	0%	1	0%	0	0%	7
Learner's home has radio	No	45%	714	57%	835	45%	1367
	Yes	55%	859	43%	629	55%	1648
	Don’t know	0%	2	0%	1	0%	5
Learner's home has mobile phone	No	21%	331	29%	418	25%	761
	Yes	79%	1244	71%	1047	75%	2256
	Don’t know	0%	0	0%	0	0%	3
Learner's home has TV	No	74%	1173	80%	1179	80%	2418
	Yes	25%	401	20%	286	20%	600
	Don’t know	0%	1	0%	0	0%	2
Learner's home has computer	No	93%	1471	95%	1395	97%	2928
	Yes	7%	103	5%	70	3%	90
	Don’t know	0%	1	0%	0	0%	2
Learner's home has refrigerator	No	90%	1425	93%	1361	95%	2870
	Yes	9%	148	7%	102	5%	147
	Don’t know	0%	2	0%	2	0%	3
Learner's home has bicycle	No	25%	399	43%	632	50%	1501

	Yes	75%	1174	57%	833	50%	1515
	Don't know	0%	2	0%	0	0%	4
Learner's home has motorbike	No	68%	1069	84%	1232	95%	2861
	Yes	32%	506	16%	232	5%	154
	Don't know	0%	0	0%	1	0%	5
Learner's home has car/truck	No	93%	1465	93%	1360	95%	2879
	Yes	7%	110	7%	105	5%	136
	Don't know	0%	0	0%	0	0%	5
Learner's home has cattle/livestock	No	21%	325	32%	473	19%	562
	Yes	79%	1248	68%	992	81%	2455
	Don't know	0%	2	0%	0	0%	3
Learner has other reading materials at home	No	68%	1073	59%	867	65%	1977
	Yes	32%	499	40%	591	34%	1020
	Don't know	0%	3	0%	7	1%	23
Frequency learner reads aloud at home	Never	47%	735	40%	580	37%	1112
	Sometimes	47%	737	53%	774	59%	1783
	Everyday	6%	97	7%	107	3%	88
	Don't know	0%	6	0%	4	1%	37
Frequency someone reads to learner at home	Never	46%	729	33%	479	40%	1201
	Sometimes	49%	766	59%	866	57%	1726
	Everyday	5%	80	8%	119	2%	72
	Don't know	0%	0	0%	1	1%	21
Learner had homework last week	No	45%	705	49%	719	56%	1680
	Yes	55%	865	51%	746	44%	1315
	Don't know	0%	5	0%	0	1%	25
Someone at home helps learner with homework	No	24%	371	29%	425	36%	1075
	Yes	76%	1201	71%	1037	64%	1922
	Don't know	0%	3	0%	3	1%	23
Learner's mother is literate	No	31%	492	28%	413	16%	476
	Yes	68%	1074	72%	1050	83%	2497
	Don't know	1%	9	0%	2	2%	47
Learner's father is literate	No	16%	251	21%	306	11%	339

	Yes	83%	1312	78%	1144	85%	2579
	Don't know	1%	12	1%	15	3%	102
Learner attended pre-school before Grade 1	No	74%	1162	80%	1170	68%	2065
	Yes	26%	411	20%	295	31%	947
	Don't know	0%	2	0%	0	0%	8
Location learner attended pre-school	This school, whole year	40%	163	34%	99	50%	472
	This school, part year	3%	12	2%	6	5%	49
	Another school	57%	236	64%	190	45%	428

‡ Mark all that apply

ANNEX 5: COMPLETE DESCRIPTIVE RESULTS FOR TEACHER QUESTIONNAIRE

QUESTION	RESPONSE OPTION	OVERALL		CHITONGA		CINYANJA		ICIBEMBA	
		% OF TEACHERS	N	% OF TEACHERS	N	% OF TEACHERS	N	% OF TEACHERS	N
Years as a teacher	5 years or less	47%	372	46%	71	52%	75	47%	41
	6 to 10 years	30%	237	31%	47	27%	39	31%	27
	11 to 15 years	15%	118	12%	19	10%	15	16%	14
	16 years or more	9%	70	11%	17	10%	14	7%	6
Highest level of education completed	Grade 7	0%	1	0%	0	0%	0	0%	0
	Grade 8	0%	0	0%	0	0%	0	0%	0
	Grade 9	2%	13	3%	4	1%	2	2%	2
	Grade 10	1%	6	1%	2	1%	2	1%	1
	Grade 11	1%	8	0%	0	3%	5	0%	0
	Grade 12	77%	615	83%	129	79%	114	95%	84
	BA/BS	1%	8	1%	2	1%	2	0%	0
	MA/MS	0%	0	0%	0	0%	0	0%	0
	Other	19%	150	12%	18	14%	14	1%	1
Highest professional qualification completed	Teacher Certificate/Diploma	69%	553	61%	94	70%	101	68%	60
	Secondary Teacher Diploma	6%	51	11%	17	3%	4	3%	3
	Bachelor's Primary	2%	17	3%	5	2%	3	1%	1
	None of the above	14%	110	14%	21	21%	30	14%	12
	Other	9%	70	12%	18	5%	7	14%	12
Number of EGR in-service teacher trainings attended	Zero	55%	442	45%	69	52%	76	47%	41
	One	17%	140	21%	32	18%	26	13%	11
	Two	13%	102	15%	24	16%	23	17%	15
	Three	7%	59	6%	9	8%	11	11%	10
	Four	3%	24	5%	8	3%	4	3%	3
	Five or more	4%	33	8%	13	3%	5	9%	8
	Very useful	90%	323	87%	75	94%	65	100%	47

Utility of in-service training	Somewhat useful	9%	34	10%	9	6%	4	0%	0
	Not useful at all	0%	1	1%	1	0%	0	0%	0
	Don't know	0%	1	1%	1	0%	0	0%	0
Number of district coaching visits for reading	Zero	74%	588	69%	107	69%	100	69%	61
	One	14%	113	14%	22	17%	24	14%	12
	Two	8%	60	8%	12	9%	13	11%	10
	Three or more	5%	38	9%	14	6%	8	6%	5
Average length of coaching visit	30 minutes or less	33%	72	43%	21	35%	16	15%	4
	31 to 60 minutes	50%	108	47%	23	43%	20	65%	17
	61 minutes or more	17%	37	10%	5	22%	10	19%	5
Utility of coaching visits	Very useful	72%	155	86%	42	67%	31	74%	20
	Somewhat useful	26%	57	14%	7	30%	14	22%	6
	Not useful at all	0%	1	0%	0	0%	0	0%	0
	Don't know	1%	3	0%	0	2%	1	4%	1
Teacher scheduled time for reading	No	4%	36	5%	7	4%	6	3%	3
	Yes	96%	765	95%	148	96%	139	97%	85
Frequency of teaching reading	Never	0%	1	0%	0	0%	0	1%	1
	Once a week	2%	17	1%	1	4%	6	1%	1
	2 to 3 days a week	22%	180	26%	40	21%	30	22%	19
	4 to 5 days a week	75%	603	74%	114	75%	109	76%	67
Adherence to weekly reading schedule	Rarely	12%	95	14%	21	9%	13	13%	11
	Mostly	38%	303	34%	53	44%	64	33%	29
	Always	50%	403	52%	81	47%	68	55%	48
Length of reading lessons	Less than 20 minutes	6%	47	5%	7	6%	8	2%	2
	20 to 29 minutes	8%	61	5%	8	12%	18	10%	9
	30 to 39 minutes	15%	123	19%	30	12%	18	8%	7
	40 to 60 minutes	61%	488	58%	90	52%	76	73%	64
	60 minutes or more	10%	82	13%	20	17%	25	7%	6

Has approved teacher's literacy guide	No	40%	323	41%	63	60%	87	34%	30
	Yes	60%	477	59%	91	40%	58	66%	58
	Don't know	0%	1	1%	1	0%	0	0%	0
Frequency using teacher's literacy guide	Never	1%	4	2%	2	0%	0	3%	2
	Sometimes	17%	81	18%	16	31%	18	12%	7
	Most of the time	23%	108	16%	15	34%	20	16%	9
	Always	60%	284	64%	58	34%	20	69%	40
Instructional materials used for reading ‡	Textbooks	34%	274	30%	47	54%	78	32%	28
	Worksheets	4%	34	3%	5	9%	13	1%	1
	Flashcards	15%	124	17%	27	24%	35	13%	11
	Story books	13%	102	10%	15	24%	35	8%	7
	Other materials	12%	96	11%	17	23%	34	5%	4
Frequency using learner reading materials in language of instruction	Never	2%	14	1%	2	1%	2	1%	1
	Sometimes	19%	153	25%	39	13%	19	20%	18
	Most of the time	26%	208	19%	30	41%	59	20%	18
	Always	53%	426	54%	84	45%	65	58%	51
Teacher conducted continuous reading assessment in last month	No	25%	197	23%	36	21%	31	22%	19
	Yes	75%	602	76%	118	78%	113	78%	69
	Don't know	0%	2	1%	1	1%	1	0%	0
Number of learners assessed last month	10 learners or less	18%	109	23%	26	32%	36	6%	4
	11 to 20 learners	16%	96	11%	13	11%	13	12%	8
	21 to 30 learners	21%	124	22%	25	9%	10	30%	20
	31 learners or more	44%	261	44%	51	48%	55	52%	34
Language most frequently used to teach	Icibemba	10%	81	0%	0	0%	0	92%	81
	Cinyanja	17%	138	0%	0	95%	138	0%	0
	Chitonga	19%	152	97%	151	0%	0	0%	0
	Kiikaonde	10%	84	0%	0	0%	0	0%	0
	Luvale	11%	85	0%	0	0%	0	0%	0
	Silozi	20%	161	1%	1	0%	0	0%	0

	Lunda	10%	81	0%	0	0%	0	0%	0
	English	1%	5	2%	3	1%	1	0%	0
	Other	2%	14	0%	0	4%	6	8%	7
Satisfied with level of parental support	No	74%	595	83%	128	68%	98	77%	68
	Yes	26%	205	17%	27	32%	47	23%	20
	Don't know	0%	1	0%	0	0%	0	0%	0
Parents monitor learner attendance	No	67%	537	70%	108	55%	80	78%	69
	Yes	33%	264	30%	47	45%	65	22%	19
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents conduct classroom observation	No	75%	600	79%	123	64%	93	81%	71
	Yes	25%	201	21%	32	36%	52	19%	17
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents monitor school project implementation	No	23%	187	28%	43	17%	24	20%	18
	Yes	76%	612	72%	112	83%	121	80%	70
	Don't know	0%	2	0%	0	0%	0	0%	0
Parents monitor availability of textbooks	No	80%	644	81%	126	70%	101	92%	81
	Yes	19%	151	16%	25	30%	44	8%	7
	Don't know	1%	6	3%	4	0%	0	0%	0
Parents monitor record of continuous assessment	No	72%	574	79%	123	61%	89	73%	64
	Yes	28%	225	21%	32	39%	56	26%	23
	Don't know	0%	2	0%	0	0%	0	1%	1
Parents help teach reading	No	74%	590	73%	113	52%	75	77%	68
	Yes	26%	210	27%	42	48%	70	22%	19
	Don't know	0%	1	0%	0	0%	0	1%	1
Parents have done other things	No	62%	494	62%	96	49%	71	86%	76
	Yes	35%	279	30%	47	50%	73	13%	11
	Don't know	3%	28	8%	12	1%	1	1%	1

‡ Mark all that apply

QUESTION	RESPONSE OPTION	KIIKAONDE		LUNDA		LUVALE		SILOZI	
		% OF TEACHERS	N	% OF TEACHERS	N	% OF TEACHERS	N	% OF TEACHERS	N
Years as a teacher	5 years or less	32%	27	45%	37	50%	42	49%	79
	6 to 10 years	36%	30	30%	25	20%	17	32%	52
	11 to 15 years	20%	17	20%	16	21%	18	12%	19
	16 years or more	12%	10	5%	4	8%	7	7%	12
Highest level of education completed	Grade 7	0%	0	0%	0	0%	0	1%	1
	Grade 8	0%	0	0%	0	0%	0	0%	0
	Grade 9	1%	1	0%	0	1%	1	2%	3
	Grade 10	0%	0	0%	0	1%	1	0%	0
	Grade 11	0%	0	0%	0	0%	0	2%	3
	Grade 12	93%	79	78%	64	69%	58	54%	87
	BA/BS	0%	0	0%	0	0%	0	2%	4
	MA/MS	0%	0	0%	0	0%	0	0%	0
	Other	6%	5	22%	18	29%	24	40%	64
Highest professional qualification completed	Teacher Certificate/Diploma	78%	66	72%	59	71%	60	70%	113
	Secondary Teacher Diploma	7%	6	9%	7	7%	6	5%	8
	Bachelor's Primary	1%	1	1%	1	1%	1	3%	5
	None of the above	9%	8	12%	10	11%	9	12%	20
	Other	5%	4	6%	5	10%	8	10%	16
Number of EGR in-service teacher trainings attended	Zero	51%	43	57%	46	50%	42	77%	125
	One	25%	21	23%	19	19%	16	9%	15
	Two	8%	7	15%	12	12%	10	7%	11
	Three	12%	10	5%	4	10%	8	4%	7
	Four	2%	2	0%	0	6%	5	1%	2
	Five or more	2%	2	0%	0	4%	3	1%	2
Utility of in-service training	Very useful	74%	31	97%	35	86%	36	92%	34
	Somewhat useful	26%	11	3%	1	14%	6	8%	3

	Not useful at all	0%	0	0%	0	0%	0	0%	0
	Don't know	0%	0	0%	0	0%	0	0%	0
Number of district coaching visits for reading	Zero	76%	65	78%	64	77%	64	79%	127
	One	15%	13	10%	8	12%	10	15%	24
	Two	5%	4	9%	7	7%	6	5%	8
	Three or more	4%	3	4%	3	4%	3	1%	2
Average length of coaching visit	30 minutes or less	19%	4	37%	7	20%	4	44%	16
	31 to 60 minutes	71%	15	37%	7	65%	13	36%	13
	61 minutes or more	10%	2	26%	5	15%	3	19%	7
Utility of coaching visits	Very useful	48%	10	61%	11	75%	15	74%	26
	Somewhat useful	48%	10	39%	7	25%	5	23%	8
	Not useful at all	0%	0	0%	0	0%	0	3%	1
	Don't know	5%	1	0%	0	0%	0	0%	0
Teacher scheduled time for reading	No	4%	3	0%	0	8%	7	6%	10
	Yes	96%	82	100%	82	92%	77	94%	152
Frequency of teaching reading	Never	0%	0	0%	0	0%	0	0%	0
	Once a week	4%	3	0%	0	0%	0	4%	6
	2 to 3 days a week	16%	14	16%	13	24%	20	27%	44
	4 to 5 days a week	80%	68	84%	69	76%	64	69%	112
Adherence to weekly reading schedule	Rarely	6%	5	11%	9	20%	17	12%	19
	Mostly	41%	35	34%	28	33%	28	41%	66
	Always	53%	45	55%	45	46%	39	48%	77
Length of reading lessons	Less than 20 minutes	1%	1	0%	0	1%	1	17%	28
	20 to 29 minutes	5%	4	4%	3	6%	5	9%	14
	30 to 39 minutes	8%	7	9%	7	17%	14	25%	40
	40 to 60 minutes	69%	59	82%	67	73%	61	44%	71
	60 minutes or more	16%	14	6%	5	4%	3	6%	9
	No	38%	32	32%	26	37%	31	33%	54

Has approved teacher's literacy guide	Yes	62%	53	68%	56	63%	53	67%	108
	Don't know	0%	0	0%	0	0%	0	0%	0
Frequency using teacher's literacy guide	Never	0%	0	0%	0	0%	0	0%	0
	Sometimes	13%	7	16%	9	19%	10	13%	14
	Most of the time	28%	15	16%	9	26%	14	24%	26
	Always	58%	31	68%	38	55%	29	63%	68
Instructional materials used for reading ‡	Textbooks	33%	28	23%	19	33%	28	28%	46
	Worksheets	7%	6	1%	1	5%	4	2%	4
	Flashcards	12%	10	12%	10	14%	12	12%	19
	Story books	15%	13	11%	9	13%	11	7%	12
	Other materials	12%	10	16%	13	6%	5	8%	13
Frequency using learner reading materials in language of instruction	Never	1%	1	1%	1	4%	3	2%	4
	Sometimes	18%	15	21%	17	15%	13	20%	32
	Most of the time	18%	15	22%	18	31%	26	26%	42
	Always	64%	54	56%	46	50%	42	52%	84
Teacher conducted continuous reading assessment in last month	No	16%	14	28%	23	25%	21	33%	53
	Yes	84%	71	72%	59	75%	63	67%	109
	Don't know	0%	0	0%	0	0%	0	0%	0
Number of learners assessed last month	10 learners or less	10%	7	16%	9	31%	19	7%	8
	11 to 20 learners	21%	15	15%	8	31%	19	19%	20
	21 to 30 learners	21%	15	29%	16	15%	9	27%	29
	31 learners or more	48%	34	40%	22	24%	15	47%	50
Language most frequently used to teach	Icibemba	0%	0	0%	0	0%	0	0%	0
	Cinyanja	0%	0	0%	0	0%	0	0%	0
	Chitonga	1%	1	0%	0	0%	0	0%	0
	Kiikaonde	99%	84	0%	0	0%	0	0%	0
	Luvale	0%	0	4%	3	98%	82	0%	0
	Silozi	0%	0	0%	0	0%	0	99%	160
	Lunda	0%	0	96%	79	2%	2	0%	0

	English	0%	0	0%	0	0%	0	1%	1
	Other	0%	0	0%	0	0%	0	1%	1
Satisfied with level of parental support	No	84%	71	66%	54	81%	68	67%	108
	Yes	16%	14	34%	28	19%	16	33%	53
	Don't know	0%	0	0%	0	0%	0	1%	1
Parents monitor learner attendance	No	69%	59	65%	53	70%	59	67%	109
	Yes	31%	26	35%	29	30%	25	33%	53
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents conduct classroom observation	No	74%	63	73%	60	85%	71	73%	119
	Yes	26%	22	27%	22	15%	13	27%	43
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents monitor school project implementation	No	14%	12	21%	17	29%	24	30%	49
	Yes	86%	73	78%	64	70%	59	70%	113
	Don't know	0%	0	1%	1	1%	1	0%	0
Parents monitor availability of textbooks	No	75%	64	87%	71	77%	65	84%	136
	Yes	24%	20	13%	11	23%	19	15%	25
	Don't know	1%	1	0%	0	0%	0	1%	1
Parents monitor record of continuous assessment	No	59%	50	84%	69	81%	68	69%	111
	Yes	40%	34	16%	13	19%	16	31%	51
	Don't know	1%	1	0%	0	0%	0	0%	0
Parents help teach reading	No	72%	61	87%	71	85%	71	81%	131
	Yes	28%	24	13%	11	15%	13	19%	31
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents have done other things	No	75%	64	46%	38	83%	70	49%	79
	Yes	15%	13	50%	41	14%	12	51%	82
	Don't know	9%	8	4%	3	2%	2	1%	1

‡ Mark all that apply

ANNEX 6: COMPLETE DESCRIPTIVE RESULTS FOR HEAD TEACHER QUESTIONNAIRE

QUESTION	RESPONSE OPTION	OVERALL		CHITONGA		CINYANJA		ICIBEMBA	
		% OF HEAD TEACHERS	N	% OF HEAD TEACHERS	N	% OF HEAD TEACHERS	N	% OF HEAD TEACHERS	N
Position at school	Head Teacher	83%	676	83%	130	85%	127	88%	79
	Deputy Head Teacher	12%	97	8%	12	13%	20	8%	7
	Senior Teacher	3%	25	5%	8	1%	1	1%	1
	None of the above	2%	18	4%	6	1%	1	3%	3
Years as a head teacher	5 years or less	52%	421	50%	78	52%	78	43%	39
	6 to 10 years	28%	231	34%	53	26%	39	27%	24
	11 to 15 years	13%	107	12%	19	15%	22	19%	17
	16 years or more	7%	56	4%	6	7%	10	11%	10
Highest level of education completed	Grade 7	0%	2	0%	0	0%	0	0%	0
	Grade 8	0%	0	0%	0	0%	0	0%	0
	Grade 9	1%	9	1%	1	1%	2	1%	1
	Grade 10	1%	5	1%	1	2%	3	1%	1
	Grade 11	0%	3	0%	0	1%	2	0%	0
	Grade 12	73%	598	82%	128	77%	115	89%	80
	BA/BS	6%	45	3%	5	5%	8	2%	2
	MA/MS	0%	4	1%	2	0%	0	0%	0
	Other	18%	150	12%	19	13%	19	7%	6
Highest professional qualification completed	Teacher Certificate/Diploma	49%	396	38%	60	52%	78	41%	37
	Secondary Teacher Diploma	19%	155	24%	38	18%	27	24%	22
	Bachelor's Primary	9%	73	8%	13	8%	12	6%	5
	None of the above	9%	73	8%	13	12%	18	10%	9
	Other	15%	119	21%	32	9%	14	19%	17
	No	81%	657	90%	140	85%	127	78%	70

Appropriate number of textbooks at start of the school years	Yes	19%	157	10%	15	15%	22	22%	20
	Don't know	0%	2	1%	1	0%	0	0%	0
If number of textbooks inappropriate, length of time to receive them	Never received	68%	445	60%	84	76%	96	77%	54
	1 year	5%	31	2%	3	4%	5	4%	3
	10 to 11 months	3%	18	2%	3	2%	2	4%	3
	8 to 9 months	2%	10	4%	6	1%	1	1%	1
	6 to 7 months	7%	43	6%	9	6%	8	1%	1
	4 to 5 months	8%	50	11%	16	3%	4	6%	4
	2 to 3 months	7%	44	9%	13	7%	9	6%	4
	1 month	1%	8	2%	3	1%	1	0%	0
	1 week or less	1%	6	2%	3	1%	1	0%	0
	Don't know	0%	2	0%	0	0%	0	0%	0
Parents monitor learners attendance	No	42%	343	45%	70	34%	50	48%	43
	Yes	58%	471	54%	85	66%	98	52%	47
	Don't know	0%	2	1%	1	1%	1	0%	0
Parents conduct classroom observations	No	63%	510	64%	100	51%	76	73%	66
	Yes	38%	306	36%	56	49%	73	27%	24
Parents monitor school project implementation	No	13%	102	11%	17	7%	10	13%	12
	Yes	87%	713	88%	138	93%	139	87%	78
	Don't know	0%	1	1%	1	0%	0	0%	0
Parents monitor availability of textbooks	No	80%	649	78%	121	65%	97	96%	86
	Yes	20%	166	22%	35	34%	51	4%	4
	Don't know	0%	1	0%	0	1%	1	0%	0
Parents review records of continuous assessment	No	55%	446	62%	96	46%	68	59%	53
	Yes	45%	370	38%	60	54%	81	41%	37
Parents help teach reading	No	69%	560	65%	102	48%	71	79%	71
	Yes	31%	255	35%	54	52%	78	21%	19
	Don't know	0%	1	0%	0	0%	0	0%	0

Parents help in another way	No	52%	425	50%	78	40%	59	77%	69
	Yes	45%	367	44%	69	60%	90	20%	18
	Don't know	3%	24	6%	9	0%	0	3%	3
Frequency school receives coaching visit from government education official	Never	52%	422	43%	67	44%	65	49%	44
	Once	32%	262	36%	56	29%	43	34%	31
	More than once a month	10%	81	13%	20	16%	24	12%	11
	Once every month	5%	41	8%	12	11%	16	2%	2
	Once every week	0%	3	0%	0	0%	0	2%	2
	Don't know	1%	7	1%	1	1%	1	0%	0
Learners with disabilities enrolled at school	No	29%	240	27%	42	42%	62	31%	28
	Yes	71%	576	73%	114	58%	87	69%	62
School has ECE class(es)	No	52%	428	26%	41	39%	58	58%	52
	Yes	48%	388	74%	115	61%	91	42%	38
Year first ECE class(es) established	2012 or before	8%	31	10%	12	10%	9	8%	3
	2013	7%	28	8%	9	8%	7	5%	2
	2014	11%	41	14%	16	10%	9	11%	4
	2015	13%	51	21%	24	8%	7	16%	6
	2016	15%	58	18%	21	9%	8	11%	4
	2017	22%	87	10%	12	20%	18	45%	17
	2018	22%	86	15%	17	34%	31	5%	2
	Don't know	2%	6	3%	4	2%	2	0%	0
Number of ECE classes at school	One	82%	319	87%	100	84%	76	84%	32
	Two	15%	58	12%	14	13%	12	13%	5
	Three	2%	7	1%	1	2%	2	3%	1
	Four or more	1%	4	0%	0	1%	1	0%	0
Type of structure used for ECE class(es)	Built classroom	76%	296	79%	91	76%	69	76%	29
	Container converted to classroom	1%	2	1%	1	0%	0	0%	0
	Informal structure	13%	51	12%	14	13%	12	8%	3

	Out in open	2%	9	2%	2	4%	4	0%	0
	Other	8%	30	6%	7	7%	6	16%	6
MoGE provided ECE teacher	No	64%	248	73%	84	77%	70	53%	20
	Yes	36%	140	27%	31	23%	21	47%	18
ECE teacher received ECE-specific training	No	2%	3	3%	1	5%	1	100%	19
	Yes	98%	138	97%	30	95%	20	0%	0
MoGE provided head teacher training to manage ECE	No	56%	218	43%	50	63%	57	74%	28
	Yes	44%	169	57%	65	36%	33	26%	10
	Don't know	0%	1	0%	0	1%	1	0%	0
MoGE provided books for ECE class(es)	No	24%	93	26%	30	22%	20	16%	6
	Yes	76%	295	74%	85	78%	71	84%	32
MoGE provided other resources for ECE class(es)	No	65%	252	67%	77	65%	59	45%	17
	Yes	35%	135	33%	38	34%	31	55%	21
	Don't know	0%	1	0%	0	1%	1	0%	0

QUESTION	RESPONSE OPTION	KIIKAONDE		LUNDA		LUVALE		SILOZI	
		% OF HEAD TEACHERS	N	% OF HEAD TEACHERS	N	% OF HEAD TEACHERS	N	% OF HEAD TEACHERS	N
Position at school	Head Teacher	73%	63	91%	75	81%	71	79%	131
	Deputy Head Teacher	20%	17	7%	6	16%	14	13%	21
	Senior Teacher	6%	5	0%	0	2%	2	5%	8
	None of the above	1%	1	1%	1	1%	1	3%	5
Years as a head teacher	5 years or less	50%	43	61%	50	57%	50	51%	83
	6 to 10 years	23%	20	27%	22	24%	21	32%	52
	11 to 15 years	13%	11	9%	7	14%	12	12%	19
	16 years or more	14%	12	4%	3	6%	5	6%	10
Highest level of education completed	Grade 7	0%	0	0%	0	0%	0	1%	2
	Grade 8	0%	0	0%	0	0%	0	0%	0

	Grade 9	1%	1	0%	0	0%	0	2%	4
	Grade 10	0%	0	0%	0	0%	0	0%	0
	Grade 11	0%	0	0%	0	0%	0	1%	1
	Grade 12	87%	75	71%	58	70%	62	48%	80
	BA/BS	3%	3	2%	2	0%	0	12%	19
	MA/MS	0%	0	0%	0	7%	6	1%	2
	Other	8%	7	27%	22	23%	20	35%	57
Highest professional qualification completed	Teacher Certificate/Diploma	42%	36	65%	53	55%	48	51%	84
	Secondary Teacher Diploma	31%	27	15%	12	17%	15	8%	14
	Bachelor's Primary	12%	10	6%	5	13%	11	10%	17
	None of the above	6%	5	5%	4	7%	6	11%	18
	Other	9%	8	10%	8	9%	8	19%	32
Appropriate number of textbooks at start of the school years	No	74%	64	68%	56	78%	69	79%	131
	Yes	24%	21	32%	26	22%	19	21%	34
	Don't know	1%	1	0%	0	0%	0	0%	0
If number of textbooks inappropriate, length of time to receive them	Never received	50%	32	59%	33	80%	55	69%	91
	1 year	17%	11	7%	4	3%	2	2%	3
	10 to 11 months	6%	4	7%	4	0%	0	2%	2
	8 to 9 months	0%	0	0%	0	1%	1	1%	1
	6 to 7 months	8%	5	7%	4	9%	6	8%	10
	4 to 5 months	11%	7	18%	10	0%	0	7%	9
	2 to 3 months	3%	2	2%	1	7%	5	8%	10
	1 month	2%	1	0%	0	0%	0	2%	3
	1 week or less	0%	0	0%	0	0%	0	2%	2
	Don't know	3%	2	0%	0	0%	0	0%	0
Parents monitor learners attendance	No	38%	33	49%	40	48%	42	39%	65
	Yes	62%	53	51%	42	52%	46	61%	100
	Don't know	0%	0	0%	0	0%	0	0%	0
	No	57%	49	63%	52	82%	72	58%	95

Parents conduct classroom observations	Yes	43%	37	37%	30	18%	16	42%	70
Parents monitor school project implementation	No	12%	10	20%	16	17%	15	13%	22
	Yes	88%	76	80%	66	83%	73	87%	143
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents monitor availability of textbooks	No	76%	65	88%	72	88%	77	79%	131
	Yes	24%	21	12%	10	13%	11	21%	34
	Don't know	0%	0	0%	0	0%	0	0%	0
Parents review records of continuous assessment	No	41%	35	70%	57	64%	56	49%	81
	Yes	59%	51	30%	25	36%	32	51%	84
Parents help teach reading	No	64%	55	74%	61	80%	70	79%	130
	Yes	35%	30	26%	21	20%	18	21%	35
	Don't know	1%	1	0%	0	0%	0	0%	0
Parents help in another way	No	70%	60	38%	31	73%	64	39%	64
	Yes	20%	17	61%	50	25%	22	61%	101
	Don't know	10%	9	1%	1	2%	2	0%	0
Frequency school receives coaching visit from government education official	Never	51%	44	52%	43	64%	56	62%	103
	Once	31%	27	32%	26	30%	26	32%	53
	More than once a month	9%	8	13%	11	3%	3	2%	4
	Once every month	5%	4	1%	1	3%	3	2%	3
	Once every week	0%	0	1%	1	0%	0	0%	0
	Don't know	3%	3	0%	0	0%	0	1%	2
Learners with disabilities enrolled at school	No	41%	35	23%	19	26%	23	19%	31
	Yes	59%	51	77%	63	74%	65	81%	134
School has ECE class(es)	No	60%	52	71%	58	74%	65	62%	102
	Yes	40%	34	29%	24	26%	23	38%	63
Year first ECE class(es) established	2012 or before	0%	0	8%	2	9%	2	5%	3
	2013	3%	1	17%	4	4%	1	6%	4
	2014	3%	1	17%	4	17%	4	5%	3

	2015	12%	4	13%	3	0%	0	11%	7
	2016	12%	4	13%	3	9%	2	25%	16
	2017	35%	12	13%	3	35%	8	27%	17
	2018	35%	12	21%	5	26%	6	21%	13
	Don't know	0%	0	0%	0	0%	0	0%	0
Number of ECE classes at school	One	82%	28	63%	15	70%	16	83%	52
	Two	18%	6	25%	6	22%	5	16%	10
	Three	0%	0	4%	1	4%	1	2%	1
	Four or more	0%	0	8%	2	4%	1	0%	0
Type of structure used for ECE class(es)	Built classroom	91%	31	71%	17	83%	19	63%	40
	Container converted to classroom	0%	0	4%	1	0%	0	0%	0
	Informal structure	6%	2	13%	3	9%	2	24%	15
	Out in open	0%	0	4%	1	0%	0	3%	2
	Other	3%	1	8%	2	9%	2	10%	6
MoGE provided ECE teacher	No	50%	17	38%	9	30%	7	65%	41
	Yes	50%	17	63%	15	70%	16	35%	22
ECE teacher received ECE-specific training	No	100%	17	7%	1	100%	16	100%	22
	Yes	0%	0	93%	14	0%	0	0%	0
MoGE provided head teacher training to manage ECE	No	53%	18	63%	15	61%	14	57%	36
	Yes	47%	16	38%	9	39%	9	43%	27
	Don't know	0%	0	0%	0	0%	0	0%	0
MoGE provided books for ECE class(es)	No	38%	13	29%	7	22%	5	19%	12
	Yes	62%	21	71%	17	78%	18	81%	51
MoGE provided other resources for ECE class(es)	No	59%	20	83%	20	65%	15	70%	44
	Yes	41%	14	17%	4	35%	8	30%	19
	Don't know	0%	0	0%	0	0%	0	0%	0

ANNEX 7: COMPLETE DESCRIPTIVE RESULTS FOR SCHOOL INVENTORY

QUESTION	RESPONSE OPTION	OVERALL		CHITONGA		CINYANJA		ICIBEMBA	
		% OF SCHOOLS	N	% OF SCHOOLS	N	% OF SCHOOLS	N	% OF SCHOOLS	N
School buildings and surroundings are clean and neat	No	23%	185	20%	31	28%	42	14%	13
	Yes	77%	631	80%	125	72%	108	86%	77
Major repairs needed	No	18%	145	19%	30	16%	24	27%	24
	Yes	82%	671	81%	126	84%	126	73%	66
Repairs needed to school buildings ‡	Broken windows	73%	492	83%	104	83%	105	61%	40
	Roof/ceiling	48%	321	53%	67	58%	73	35%	23
	Classroom walls	67%	451	75%	95	74%	93	53%	35
	Outside school walls	35%	237	34%	43	44%	55	20%	13
	Playgrounds	35%	237	60%	75	39%	49	15%	10
	Furniture	80%	537	86%	108	87%	109	42%	28
	Other	25%	169	21%	27	22%	28	38%	25
School has electricity and it functions	No	73%	599	66%	103	71%	106	78%	70
	Yes, not functioning	5%	43	4%	6	6%	9	2%	2
	Yes, functioning	21%	174	30%	47	23%	35	20%	18
Source of drinking water	None	13%	104	10%	15	15%	23	19%	17
	Well	31%	253	14%	22	21%	31	30%	27
	Filter/cooler	2%	13	4%	7	1%	1	0%	0
	Other	55%	446	72%	112	63%	95	51%	46
Drinking water source functions	No	19%	158	12%	18	21%	31	33%	30
	Yes	80%	656	88%	138	79%	119	67%	60
	Don't know	0%	2	0%	0	0%	0	0%	0
Number of functional toilets	3 or less	26%	215	15%	24	23%	34	28%	25
	4 to 6	38%	307	33%	52	42%	62	38%	34

	7 to 9	15%	124	17%	26	14%	21	19%	17
	10 or more	21%	167	35%	54	21%	31	16%	14
Number of functional toilets for girls	Zero	1%	9	1%	1	1%	2	0%	0
	One	20%	147	11%	16	17%	24	23%	18
	Two	33%	235	26%	37	36%	50	34%	26
	Three	14%	102	17%	24	14%	19	21%	16
	Four	16%	117	19%	27	14%	19	14%	11
	Five or more	16%	112	26%	37	19%	26	8%	6
Toilets are clean	Not at all clean	16%	119	10%	15	20%	29	8%	7
	Somewhat clean	65%	494	69%	105	68%	98	51%	44
	Very clean	19%	147	21%	32	12%	18	41%	35
School has telephone and it functions	None	41%	337	31%	48	27%	41	70%	63
	Yes, landline	1%	7	0%	0	0%	0	0%	0
	Yes, cell phone	56%	457	69%	108	69%	104	29%	26
	Other	2%	15	0%	0	3%	5	1%	1
School has library and learners use it	No	86%	701	74%	116	69%	104	97%	87
	Yes, learners don't use	5%	43	8%	12	11%	17	1%	1
	Yes, learners use it	9%	72	18%	28	19%	29	2%	2
School has a playground	No	16%	129	15%	24	15%	22	9%	8
	Yes	84%	687	85%	132	85%	128	91%	82
School has wall around it	No	97%	789	92%	143	97%	146	97%	87
	Yes	3%	25	8%	13	2%	3	3%	3
	Don't know	0%	2	0%	0	1%	1	0%	0
School has security guard	No	85%	691	78%	122	78%	117	88%	79
	Yes	15%	125	22%	34	22%	33	12%	11

‡ Mark all that apply

QUESTION	RESPONSE OPTION	KIIKAONDE		LUNDA		LUVALE		SILOZI	
		% OF SCHOOLS	N	% OF SCHOOLS	N	% OF SCHOOLS	N	% OF SCHOOLS	N
School buildings and surroundings are clean and neat	No	13%	11	15%	12	27%	24	32%	52
	Yes	87%	74	85%	70	73%	64	68%	113
Major repairs needed	No	16%	14	21%	17	20%	18	11%	18
	Yes	84%	71	79%	65	80%	70	89%	147
Repairs needed to school buildings ‡	Broken windows	79%	56	75%	49	70%	49	61%	89
	Roof/ceiling	45%	32	37%	24	36%	25	52%	77
	Classroom walls	62%	44	60%	39	69%	48	66%	97
	Outside school walls	44%	31	43%	28	14%	10	39%	57
	Playgrounds	34%	24	17%	11	26%	18	34%	50
	Furniture	94%	67	65%	42	76%	53	88%	130
	Other	21%	15	29%	19	21%	15	27%	40
School has electricity and it functions	No	75%	64	70%	57	80%	70	78%	129
	Yes, not functioning	4%	3	15%	12	6%	5	4%	6
	Yes, functioning	21%	18	16%	13	15%	13	18%	30
Source of drinking water	None	11%	9	22%	18	11%	10	7%	12
	Well	33%	28	56%	46	34%	30	42%	69
	Filter/cooler	5%	4	1%	1	0%	0	0%	0
	Other	52%	44	21%	17	55%	48	51%	84
Drinking water source functions	No	15%	13	34%	28	19%	17	13%	21
	Yes	85%	72	66%	54	78%	69	87%	144
	Don't know	0%	0	0%	0	2%	2	0%	0
Number of functional toilets	3 or less	26%	22	43%	35	40%	35	24%	40
	4 to 6	38%	32	41%	34	45%	40	32%	53
	7 to 9	14%	12	11%	9	10%	9	18%	30
	10 or more	22%	19	5%	4	5%	4	25%	41
Number of functional toilets for girls	Zero	4%	3	1%	1	1%	1	1%	1

	One	25%	20	41%	29	36%	28	9%	12
	Two	30%	24	35%	25	42%	32	30%	41
	Three	9%	7	7%	5	9%	7	18%	24
	Four	17%	14	11%	8	9%	7	23%	31
	Five or more	15%	12	4%	3	3%	2	19%	26
Toilets are clean	Not at all clean	17%	14	11%	8	24%	19	19%	27
	Somewhat clean	64%	53	67%	51	64%	50	66%	93
	Very clean	19%	16	22%	17	12%	9	14%	20
School has telephone and it functions	None	55%	47	54%	44	34%	30	39%	64
	Yes, landline	1%	1	2%	2	0%	0	2%	4
	Yes, cell phone	44%	37	44%	36	65%	57	54%	89
	Other	0%	0	0%	0	1%	1	5%	8
School has library and learners use it	No	93%	79	96%	79	97%	85	92%	151
	Yes, learners don't use	5%	4	2%	2	0%	0	4%	7
	Yes, learners use it	2%	2	1%	1	3%	3	4%	7
School has a playground	No	18%	15	13%	11	36%	32	10%	17
	Yes	82%	70	87%	71	64%	56	90%	148
School has wall around it	No	98%	83	98%	80	99%	87	99%	163
	Yes	2%	2	2%	2	0%	0	1%	2
	Don't know	0%	0	0%	0	1%	1	0%	0
School has security guard	No	87%	74	88%	72	93%	82	88%	145
	Yes	13%	11	12%	10	7%	6	12%	20

‡ Mark all that apply

ANNEX 8: COMPLETE RESULTS FOR SUBTASK CORRELATIONS

Table A37 features the subtask correlations for the Chitonga EGRA. There was a strong positive or very strong positive relationship between syllable identification and letter sound identification (0.723), non-word reading and letter sound identification (0.661), non-word reading and syllable identification (0.912), oral reading and letter sound identification (0.613), oral reading and syllable identification (0.859), oral reading and non-word reading (0.887), reading comprehension and syllable identification (0.783), reading comprehension and non-word reading (0.820), reading comprehension and oral reading (0.905), and English listening comprehension and English vocabulary (0.618).

TABLE A37: CHITONGA PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUND IDENTIFICATION	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound identification	0.237	1						
3. Syllable identification	0.264	0.723	1					
4. Non-word reading	0.265	0.661	0.912	1				
5. Oral reading	0.247	0.613	0.859	0.887	1			
6. Reading comprehension	0.297	0.557	0.783	0.820	0.905	1		
7. English vocabulary	0.205	0.323	0.358	0.337	0.328	0.327	1	
8. English listening comprehension	0.228	0.314	0.329	0.335	0.325	0.341	0.618	1

Table A38 features the subtask correlations for the Cinyanja EGRA. There was a strong positive or very strong positive relationship between syllable identification and letter sound identification (0.613), Non-word reading and syllable identification (0.921), oral reading and syllable identification (0.914), oral reading and Non-word reading (0.925), reading comprehension and syllable identification (0.803), reading comprehension and Non-word reading (0.836), and reading comprehension and oral reading (0.901).

TABLE A38: CINYANJA PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUND IDENTIFICATION	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound identification	0.237	1						
3. Syllable sound	0.316	0.613	1					
4. Non-word reading	0.285	0.556	0.921	1				
5. Oral reading	0.303	0.535	0.914	0.925	1			
6. Reading comprehension	0.328	0.471	0.803	0.836	0.901	1		
7. English vocabulary	0.286	0.222	0.309	0.289	0.280	0.273	1	
8. English listening comprehension	0.306	0.184	0.269	0.266	0.265	0.258	0.544	1

Table A39 features the subtask correlations for the Icibemba EGRA. There was a strong positive or very strong positive relationship between syllable identification and letter sound identification (0.686), non-word reading and letter sound identification (0.642), non-word reading and syllable identification (0.917), oral reading and syllable identification (0.867), oral reading and non-word reading (0.914), reading comprehension and syllable identification (0.811), reading comprehension and non-word reading (0.844), and reading comprehension and oral reading (0.888).

TABLE A39: ICIBEMBA PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUND IDENTIFICATION	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound identification	0.322	1						
3. Syllable sound	0.361	0.686	1					
4. Non-word reading	0.341	0.642	0.917	1				
5. Oral reading	0.331	0.546	0.867	0.914	1			
6. Reading comprehension	0.377	0.553	0.811	0.844	0.888	1		
7. English vocabulary	0.208	0.333	0.351	0.340	0.318	0.297	1	
8. English listening comprehension	0.224	0.282	0.321	0.316	0.301	0.292	0.486	1

Table A40 features the subtask correlations for the Kiikaonde EGRA. There was a strong positive or very strong positive relationship between syllable identification and letter sound identification (0.655), non-word reading and syllable identification (0.900), oral reading and syllable identification (0.845), oral reading and non-word reading (0.899), reading comprehension and syllable identification (0.799), reading comprehension and non-word reading (0.832), reading comprehension and oral reading (0.880), and English listening comprehension and English vocabulary (0.663).

TABLE A40: KIIKAONDE PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUND IDENTIFICATION	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound	0.235	1						
3. Syllable sound	0.289	0.655	1					
4. Non-word reading	0.271	0.599	0.900	1				
5. Oral reading	0.256	0.534	0.845	0.899	1			
6. Reading comprehension	0.280	0.520	0.799	0.832	0.880	1		
7. English vocabulary	0.372	0.271	0.342	0.317	0.312	0.321	1	
8. English listening comprehension	0.295	0.234	0.269	0.259	0.258	0.277	0.663	1

Table A41 features the subtask correlations for the Lunda EGRA. There was a strong positive or very strong positive relationship between non-word reading and syllable identification (0.911), oral reading and syllable identification (0.870), oral reading and non-word reading (0.919), reading comprehension and syllable identification (0.813), reading comprehension and non-word reading (0.859), and reading comprehension and oral reading (0.926).

TABLE A41: LUNDA PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUNDS	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound identification	0.182	1						
3. Syllable sound	0.277	0.532	1					
4. Non-word reading	0.278	0.527	0.911	1				

5. Oral reading	0.290	0.465	0.870	0.919	1			
6. Reading comprehension	0.310	0.442	0.813	0.859	0.926	1		
7. English vocabulary	0.292	0.141	0.288	0.298	0.321	0.316	1	
8. English listening comprehension	0.271	0.142	0.260	0.283	0.312	0.329	0.582	1

Table A42 features the subtask correlations for the Luvale EGRA. There was a strong positive or very strong positive relationship between non-word reading and syllable identification (0.937), oral reading and syllable identification (0.927), oral reading and non-word reading (0.942), reading comprehension and syllable identification (0.865), reading comprehension and non-word reading (0.869), and reading comprehension and oral reading (0.916).

TABLE A42: LUVALE PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUNDS	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound identification	0.296	1						
3. Syllable sound	0.339	0.553	1					
4. non-word reading	0.316	0.545	0.937	1				
5. Oral reading	0.316	0.521	0.927	0.942	1			
6. Reading comprehension	0.331	0.478	0.865	0.869	0.916	1		
7. English vocabulary	0.319	0.343	0.440	0.431	0.434	0.435	1	
8. English listening comprehension	0.344	0.313	0.390	0.374	0.396	0.403	0.551	1

Table A43 features the subtask correlations for the Silozi EGRA. There was a strong positive or very strong positive relationship between syllable identification and letter sound identification (0.615), non-word reading and syllable identification (0.915), oral reading and syllable identification (0.904), oral reading and non-word reading (0.926), reading comprehension and syllable identification (0.795), reading comprehension and non-word reading (0.804), and reading comprehension and oral reading (0.849).

TABLE A43 SILOZI PEARSON CORRELATION COEFFICIENTS

SUBTASK	1. LISTENING COMPREHENSION	2. LETTER SOUND IDENTIFICATION	3. SYLLABLE IDENTIFICATION	4. NON-WORD READING	5. ORAL READING	6. READING COMPREHENSION	7. ENGLISH VOCABULARY	8. ENGLISH LISTENING COMPREHENSION
1. Listening comprehension	1							
2. Letter sound	0.277	1						
3. Syllable sound	0.293	0.615	1					
4. Non-word reading	0.278	0.574	0.915	1				
5. Oral reading	0.297	0.539	0.904	0.926	1			
6. Reading comprehension	0.338	0.500	0.795	0.804	0.849	1		
7. English vocabulary	0.365	0.336	0.405	0.389	0.400	0.411	1	
8. English listening comprehension	0.283	0.308	0.350	0.357	0.369	0.379	0.512	1

ANNEX 9: THREE STAGES OF READING

STAGES OF LEARNING TO READ AND THE CORRESPONDING EGRA TASKS

Regardless of the language, all children who learn to read advance from being pre-readers to initial readers to fluent readers. At each stage, they develop a different set of competencies, from oral language speaking and listening skills in the first stage, to initial decoding skills in the second stage, to achieving reading fluency and comprehension in Stage 3. The EGRA tool measures children's abilities according to these three stages of reading development:

Stage 1: Pre-Reading Skills. In Stage 1, which typically lasts from birth to kindergarten, children learn oral language skills. Oral language skills are comprised of both listening comprehension and phonemic awareness skills (the ability to hear and manipulate sounds in spoken words). Testing of listening comprehension and phonemic awareness skills is critical because they are pre-requisites to reading skills acquisition. One of the most compelling findings in beginning reading research is that phonemic awareness is a strong predictor of early reading success. These pre-reading skills are measured through three orally administered EGRA subtasks: (1) Listening Comprehension, (2) Syllable Segmentation, and (3) Initial Sound Identification.

Stage 2: Initial Reading Skills. This stage consists of phonics, or alphabetic understanding, and decoding skills. In Stage 2, children should learn how to associate letters with their corresponding sounds. Understanding that there is a clear link between a letter and a sound is known as alphabetic understanding, or phonics. This is the second phase of initial reading, because it builds on the concept of identifying sound patterns in speech by connecting the sound patterns to the printed letters. Identification of letters and sounds is measured through the Letter Name Knowledge and Syllable Reading subtasks. Stage 2 also measures whether children can read sight words and whether they can read unfamiliar words by blending and segmenting sounds into recognizable words (decoding skills). The Familiar Word Reading and Non-Word Reading subtasks in EGRA measure these skills.

Stage 3: Reading Fluency and Comprehension Skills. Once beginning readers have recognized speech sounds (pre-reading) and developed decoding skills (initial reading), the third stage is reading with enough fluency and automaticity to retain words long enough in memory to comprehend what is read. Reading fluency is defined as the ability to read orally aloud or silently with speed, accuracy, and proper expression; reading comprehension is the ability to connect sentences, infer new words from the context, and derive meaning. Thus, reading fluency with comprehension is defined as the ability to decode and comprehend text at the same time. Because oral reading fluency and reading comprehension capture this complex process, these two subtasks can be used to characterize overall reading competency. Fluency and comprehension skills are measured through the Oral Reading Fluency and Reading Comprehension subtasks. As many factors affect children's reading progress, when a child progresses from one stage to the next or achieves reading fluency varies. While the Reading Comprehension subtask in EGRA may assess whether children can read fluently and comprehend texts, the EGRA tools do not measure content knowledge linked to the curriculum.

FULL DESCRIPTION OF THE BASELINE EGRA SUBTASKS

LISTENING COMPREHENSION. In the baseline EGRA, two listening comprehension subtasks were administered to each learner, in one of the seven LoI as well as in English. Learners are asked to orally

respond to five comprehension questions about a passage that was read out loud to them by an assessor. Questions may be literal and can be answered directly from the text or inferential, which require the learner to apply their own knowledge as well as the text to answer the question. The passage is read only one time and the task is untimed. Scores are calculated as the number and percentage of correct answers.

LETTER SOUND IDENTIFICATION. One hundred upper- and lower-case letters in one of the LoI are presented to learners in a random order in a ten by ten grid. The learner produces the sounds of as many of the 100 letters as they can in a minute. Scores are calculated as both the total number and percent of correct letters in relation to the number of letters attempted, as well as a fluency measure as the number of correct sounds per minute. Each of the individual data points, total letter sounds identified, incorrect letter sounds, and the time remaining enable the evaluation team to further differentiate learners' results. For example, a learner with a high level of fluency but low accuracy can be discerned from a learner with less fluency but a higher degree of accuracy.

SYLLABLE IDENTIFICATION. One hundred different syllable pairs or units in one of the LoI are presented to the learner in lower cases letters within a ten by ten grid. The learner provides as many of the blended sounds associated with each of the syllable combinations in a minute. Scores are calculated as both the total number and percent correct of the syllables in relation to the number of syllables attempted. In contexts where the language is primarily open, different syllabic combinations are important building blocks upon which more complex words are built. As this is the case with Zambia's local languages, Education Data activity included the syllabic identification subtask in the baseline EGRA.

NON-WORD READING. To differentiate learners' memorization or recognition of common words from their phonics skills, learners are presented with non-words in one of the LoI. Since non-words have no meaning and would be unfamiliar to the learner, this subtask enables Education Data activity to assess learners' ability to apply letter or syllable sounds to decode words. The non-words follow the rules of the Zambian languages, using letters in legitimate positions and homophones of real words are not used. In the baseline EGRA, 50 one- and two- syllable non-words are presented to the learner in a grid with five columns and ten rows. Learners read as many of the words correctly in one minute. Scores are calculated as the number of correct non-words read per minute.

ORAL READING FLUENCY. Learners read a passage in one of the LoI out loud to the assessor with a one-minute time limit. The assessor marks words that are read incorrectly on their electronic tablet as well as the last word the learner attempted to read at the one-minute marker. Scores are calculated as the total number of correct words read per minute (CWPM) in relation to the total number of words attempted.

READING COMPREHENSION. After learners have read the oral passage out loud, the assessor asks them a set of literal and inferential comprehension questions. Data collection software prompts the assessor to ask only questions up to the text the child was able to read during the one-minute time allotted. Scores are calculated as the proportion of the questions answered correctly. Inferential questions may have more than one right answer, but only logical answers based on the text and the context are accepted. Literal questions are linked directly to the oral reading passage and measure learners recall of basic information from the passage such as where it took place and the individual events that occurred.

ENGLISH VOCABULARY. Beginning in Grade 2, learners in Zambia are introduced to English in the classroom as a foreign language subject. The curriculum for this first year focuses on developing learners'

oral language and vocabulary skills in everyday contexts. To assess learners' abilities in English, learners were presented with twenty vocabulary words to identify, which included body parts, objects in the classroom environment, and spatial relationships indicated by the assessor. This task was not timed. To increase the validity of the measurement, the instructions were read to the learners in the local language and only the vocabulary words were read in English. Scores are calculated as the total number of words or phrases correctly identified.

ANNEX 10: METHODOLOGY

INSTRUMENT ADAPTATION

Development of grade-appropriate and context-specific EGRA tools in several languages involves extensive research, drafting, adaptation, and pilot testing. In Zambia, the USAID-funded Read to Success project developed an EGRA tool in 2014 through a multi-stakeholder adaption workshop. In addition, ECZ developed an EGRA tool for the assessment they conducted in 2018. Education Data activity staff along with curriculum, reading and language specialists from ECZ reviewed and adapted the EGRA tools at a four-day instrument adaptation workshop in August 2018. Based on the workshop and discussions with USAID, Education Data activity choose to use existing subtasks (for which the order of the items was changed) as well as to develop new subtasks to ensure test security. For each of the GRZ-designated LoI multiple versions of the listening comprehension, syllable identification, non-word reading, oral reading passage and comprehension subtasks were developed. The individual letters in the alphabetic knowledge subtask of previously used EGRAs were scrambled. Three versions of the English listening comprehension subtask were also developed. All of the different versions of the subtasks were divided up to create three different forms for each LoI.

PILOT TESTING

The different forms of the instruments were piloted in 14 schools in September 2018. The pilot study provided Education Data activity with the opportunity to evaluate the reliability of the instruments. The pilot sample consisted of approximately 90 learners per LoI, except for Luvale, which had a sample of 75 learners. Within each LoI, each of the three forms were piloted with 30 learners. The pilot data results enabled Education Data activity to determine which versions of each subtask were best to use during the baseline EGRA.

FINALIZATION AND VALIDATION OF EGRA TOOLS

In partnership with MoGE, ECZ, and USAID, Education Data activity held a Validation Workshop on October 9th to finalize the baseline EGRA tools for each of the seven LoI as well as English. With USAID-approval, the final versions of the EGRA tools were programmed into MSI's EGRA application, Myna, by Education Data activity staff and then loaded onto electronic tablets to be used at baseline.

DATA COLLECTION TEAM RECRUITMENT

Education Data activity placed an advertisement in the Zambia Daily Mail to recruit individuals to serve as assessors and QCOs. Education Data activity also worked with ECZ to review both the requirements for the positions as well as lists of assessors that participated in prior ECZ administered EGRAs. The general requirements for both positions was; (1) Zambian citizenship; (2) the ability to read and speak at least one of the local languages of the assessment; (3) proficiency using a computer or hand-held device (tablet); (4) previous experience in conducting EGRAs; (5) fluent in written and spoken English and; (6) willingness to work in the field in some hard to reach locations. In addition to the general requirements, assessors were required to have a diploma and QCOs were required to have an undergraduate degree plus 2 years of experience in conducting assessments. From the 481 applications that Education Data activity received, 58 individuals were shortlisted to be QCOs and 119 individuals were shortlisted to be assessors. Of the

177 shortlisted candidates, approximately 32% were drawn from the GRZ, and approximately 48% had prior experience conducting EGRAs.

SAMPLING AND WEIGHTS

Generally, for sampling schools, probability proportional to size (PPS) sampling is the most frequently used and recommended sampling technique. We have used a three-stage sampling technique. In stage 1, schools were randomly selected in each district proportional to total number of urban and rural schools (i.e., school location). In stage 2, within each rural and urban location category, the sample of schools were selected randomly proportionately to government run public schools with and without ECE or community schools with and without ECE program (i.e., school type). In stage 3, within each of the sampled school, from the Grade 2 class roster up to 10 boys and 10 girls were randomly selected during data collection for the baseline.

With this sampling technique, schools (within each rural and urban category, school location) are selected for stage 1 sampling, where the probability of selection of each school (rural or urban, school location) is proportional to the total number of schools within each school location category. The weight w_1 for stage 1 is the inverse of the probability of school selection. That is,

$$w_1 = \frac{Total\ number\ of\ schools\ within\ each\ school\ location\ in\ the\ district}{Number\ of\ sample\ schools\ within\ each\ school\ location\ in\ the\ district}$$

Within each rural and urban school (school location) category, schools (within government run public schools with and without ECE or community schools with and without ECE program) are selected for stage 2 sampling, where the where the probability of selection of each school (government run public schools with and without ECE or community schools with and without ECE program) is proportional to the total number of schools within each school location and each school type. The weight w_2 for stage 2 is,

$$w_2 = \frac{Total\ number\ of\ schools\ within\ each\ school\ type\ and\ school\ location\ in\ the\ district}{Number\ of\ sample\ schools\ within\ each\ school\ type\ and\ school\ location\ in\ the\ district}$$

In stage 3, the probability of selection of students (by gender) in the school is the number of students to be selected divided by the number of students (by gender) in Grade 2. The weight w_3 for stage 3 is,

$$w_3 = \frac{Total\ number\ of\ Grade\ 2\ students\ within\ each\ gender\ in\ the\ selected\ sample\ school}{Number\ of\ sample\ students\ selected\ within\ each\ gender\ in\ the\ sample\ school}$$

The final weight w is the product of all three sampling weights w_1, w_2, and w_3. Therefore,

$$w = w_1 * w_2 * w_3$$

If the weights are equal, it follows that the weighted mean is the same as the unweighted mean. While in theory, this is what should happen, it usually does not due to fewer pupils sampled in some schools, stratification of schools, replacement schools and so on. However, PPS sampling give weights that are close to each other, thus reducing sample bias.

ANNEX 11: COMPLETE SET OF EGRA AND SSME TOOLS

2018 BASELINE EGRA TOOL: CHITONGA

Chitonga/Zambia Grade 2 Reading Assessment: Student Response Form
Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Wabuka buti? Izyina lyangu ndime_____, ndikkala_____. Ndiyanda kulipandulula asyoonto kutegwa undizyibe. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.

[Number and ages of children; favourite sport, radio or television program, etc.]

1. Ncinzi ncoyandisya kucita ciindi notali kucikolo? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Nzyisobano nzi nzyoyandisya kusobana?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Ndiyanda kukwaambila nceli waano sunu. Ndibeleka mumutabi wamfwulumende uulanganya lwiiyo mucisi ca Zambia alimwi tusola kuzyiba mbuli bana mbobaiya kubala akulemba. Yebo nduwe wakasalwa mucoolwe. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Tuyanda kuti yebo mbookasalwa utugwasye. Pele kuti naa kotayandi kutola lubazu inga wakaka. We would like your help in this. But you do not have to take part if you do not want to.

Tuyakusobana cisobano cakubala mabala. Ndilakwaambila kuti ubale tubala, mabala alimwi akaano kafwaafwi cakupozya. We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.

Kwiinda mukubelesya nkoloko eeyi, ndiyakubona ciindi ncotitole kubala. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Ooyu TAULI musunko pe alimwi taakwe mboukonzya kunyonganya lwiiyo lwako lwamucikolo. This is NOT a test and it will not affect your grade at school.

Ndilakubuzya iimbi mibuzyo iijatikizya mukwasyi wako mbuli mulaka ngomwaambaula mumukwasyi kuŋanda yanu alimwi azyintu nzyomujisi mumukwasyi wenu. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

TANDIKWE kulilemba zyina lyako kutegwa kubule uuzyiba kuti nduwe wandipa bwiinguzi oobu. I will NOT write down your name so no one will know these are your answers.

Alimwi ulaangulukide kutatola lubazu kuti kotayandi. Twatalika, naa kuli mubuzyo uutikukakile kuwiingula, cili biyo kabotu inga wauleka. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.

Sena ulijisi mibuzyo yakubuzya? Do you have any questions?

Sena walibambila kuti inga twatalika? Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

Sub-test 1. LISTENING COMPREHENSION	🕮 **X**	🕐 **X**
🗣**Ndilakubalila caano cifwaafwi munzila yakwaambisya CIINDI COMWE biyo, mpoona ndamana kubala, ndakubuzya mibuzyo imwi. Ndalomba uswiilisyisye kabotu ndabala, kutegwa upe bwiinguzi bubotu kumibuzyo. Ulakonzya kupa bwiinguzi kumibuzyo mumulaka ngoyanda omwini. Sena walibambila? Atutalike.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.		Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says, "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.		
Moonga a Muloongo bakali kwiiya kucikolo cakali kumbali amulonga. Bumwi buzuba Moonga a Muloongo bakasika kufwambaana kucikolo. Bakatalika kuyamba mumulonga. Moonga a Muloongo akabatola mayuwe kutala amulonga. Moonga a Muloongo bakalomba bazubi kuti babapilusye kucikolo. Moonga a Muloongo bakajana bamwi basicikolo bali kale mukkilasi.		

Bayi babo bakabaambila kuti tabeelede kuya kuyamba alimwi mumulonga.				
1. Cikolo ca Moonga a Muloongo cakali munsi aanzi? (Mulonga)	1	0	.	
2. Ncinzi ncobakacita ba Moonga a Muloongo nibakafwambaana kusika kucikolo? (Kuyamba mumulonga)	1	0	.	
3. Ncinzi cakatonka Moonga a Muloongo kuya kutala amulonga? (Mayuwe)	1	0	.	
4. Nguni wakapilusya Moonga a Muloongo kucikolo? (Bazubi)	1	0	.	
5. Uyeeya kuti Moonga a Muloongo bakalimvwa buti nobakajana kuti basicikolo bamwi banjila kale mukkilasi? (Bakalimvwa bubi)	1	0	.	

Wacita kabotu! Atuunke kucibeela citobela. Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION	🕮 **Page 1**	🕐 60 seconds
🗣 **Ndeeli peeji lijisi tubala tubelesegwa kubamba mabala a Chitonga. Ndalombesya undaambile tubeela twamabala MBOTUMVWIKA mbuli mbokonzya.** Here is a page full of letters of the Chitonga alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not their names, but their sounds. [point to the letter T] **Mukonzyanyo ngooyu, mbokamvwika kabeela kakabala aka ngu /t/.** For example, the sound of this letter is /t/. [point to the letter M] **Atutalike kubala: Ndaambile mbokamvwika kabeela kakabala aka?** Let's practice: Tell me the sound of this letter. ✔🗣 **Cabota, mbombubo obu mbokamvwika kabeela kakabala aka, ngu /m/.** Good, the sound of this letter is /m/. *🗣 **Aaka kabeela kakabala kamvwika boobu /m/.** The sound of this letter is /m/. [point to the letter S] **Ono atusoleke kubala kambi kabeela kakabala. Ndaambile mbokamvwika kabeela kakabala aka.** Now let us try another one. Tell me the sound of this letter. ✔🗣 **Cabota, mbombubo obu mbokamvwika kabeela kakabala, ngu /s/.** Good, the sound of this letter is /s/.		Start the timer when the child reads the first letter. ➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on" ✋ When the timer reaches 0, say "stop." ✋ If the child does not provide a single correct response on the first line (10

Aaka kabeela kakabala kamvwika boobu/s/. The sound of this letter is /s/.

[point to first letter] **Ndaamba kuti "talika", utalike mpoona awa apeeji kuunka kumbele.**

Kotondeka kabeela kakabala komwe-komwe akundaambila mbokamvwika cakwaambisya.

Kofwambaanisya kubala alimwi mukabotu-kabotu mbuli mbokonzya. Kuti naa wajana kabeela kakabala nkotazyi, kasotoke wiinke kukabeela kakabala katobela. Kobikka kanwe kako akabeela kakabala kataanguna. Sena walibambila? Talika. When I say "Begin," start here and go across the page. Point to each letter and tell me the sound of that letter in a loud voice. Read as quickly and carefully as you can. If you come to a letter you do not know, go on to the next letter. Put your finger on the first letter. Ready? Begin.

items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

(/) Mark any incorrect letters with a slash

(Ø) Circle self-corrections if you already marked the letter incorrect

( ]) Mark the final letter read with a bracket

go on to the next subtask.

Examples: t m s

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
V	m	E	T	c	s	A	u	A	y	*(10)*
I	B	a	J	A	u	B	f	b	N	*(20)*
k	O	u	O	e	l	S	L	i	a	*(30)*
e	W	i	A	D	p	O	U	E	k	*(40)*
ŋ	m	S	U	b	k	B	l	a	t	*(50)*
I	A	z	m	I	n	H	N	w	a	*(60)*
u	Y	U	A	w	M	Z	K	u	N	*(70)*
n	B	N	g	c	I	A	E	M	W	*(80)*
L	a	H	K	y	N	T	o	c	i	*(90)*
B	G	Y	O	d	K	E	i	K	L	*(100)*

Sub-test 3. SYLLABLE FLUENCY	**Page 2**	60 seconds
🗣 **Ndeeli peeji lijisi tubeela tubelesyegwa kubamba mabala a Chitonga. Ndalomba undibalile tubeela twamabala ntokonzya.** Here is a page full of syllables. Please read as many syllables as you can. [point to the syllable /**ba/**] **Mukozyanyo ngooyu, mbokamvwika kabeela kakabala aka ngu /ba/.** For example, this syllable is /ba/. [point to the syllable [**do**] **Atutalike kubala: Ndaambile mbokamvwika kabeela kakabala aka?** Let's practice: Read this syllable. ✓🗣 **Cabota, mbombubo obu mbokamvwika kabeela kakabala aka, ngu /do/.** Good, this syllable is /do/. ✗🗣 **Aaka kabeela kakabala kamvwika boobu /do/.** This syllable is /do/. [point to the syllable [**gi**] **Ono atusoleke kubala kambi kabeela kakabala. Ndaambile mbokamvwika kabeela kakabala aka.** Now let us try another one. Read this syllable. ✓🗣 **Cabota, mbombubo obu mbokamvwika kabeela kakabala, ngu /gi/.** Good, this syllable is /gi/. ✗🗣 **Aaka kabeela kakabala kamvwika boobu/gi/.** This syllable is /gi/. [point to first syllable] **Ndaamba kuti "talika", utalike mpoona awa apeeji kuunka kumbele. Kotondeka kabeela kakabala komwe-komwe akundaambila cakupozya. Kofwambaanisya kubala alimwi mukabotu-kabotu mbuli mbokonzya. Kuti naa wajana kabeela kakabala nkotazyi, kasotoke wiinke kukabeela kakabala katobela. Kobikka kanwe kako akabeela kakabala kataanguna. Sena walibambila? Talika.** When I say "Begin," start here and go across the page. Point to each syllable and say that syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot say, go on to the next one. Put your finger on the first syllable. Ready? Begin.	Start the timer when the child reads the first syllable. ➲If a child hesitates or stops on a letter for 3 SECONDS, point to the next syllable and say "Go on" ✋When the timer reaches 0, say "stop." ✋If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.	

✍ (/) Mark any incorrect syllables with a slash
(Ø) Circle self-corrections if you already marked the syllable incorrect
( ]) Mark the final syllable read with a bracket

Examples: ba do gi

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
be	ci	di	ge	ju	Ko	mi	no	pu	sa	*(10)*
wi	ye	zo	cu	ga	Zyo	ki	lo	me	pi	*(20)*

ze	me	ha	ti	bu	mba	nwe	pye	twi	ndo	*(30)*
nso	bbe	ntu	lya	yo	Nti	nji	zwe	sya	nu	*(40)*
myo	nge	nyo	fwa	swi	Nda	mya	ne	ngo	mpu	*(50)*
hi	zyu	swa	mbu	syi	kwa	gwe	nyi	dya	myi	*(60)*
cca	nyu	je	tu	twa	nwi	zye	byu	nsu	dwe	*(70)*
pyo	nsa	ccu	lye	nta	He	tyu	si	za	twa	*(80)*
gwi	mwa	pa	kke	nu	Syo	myo	nju	nsi	ku	*(90)*
mbi	syu	mpo	jwe	ŋu	Ho	nya	lyi	myi	su	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS)		
✍ Exercise discontinued because the child had no correct answers in the first line		

Sub-test 4. NON-WORD READING | **Page 3** | 60 seconds

🗣 **Ngaaya mabala aabambidwe mu Chitonga. Ndiyanda kuti ubale mabala manji mbuli mbokonzya. Utaambi tubeela twamabala pele ubale mabala oonse mbuli mbwaabede.** Here are some made-up words in Chitonga. I would like you to read as many as you can. Do not spell the words but read them.

[point to the word "tico"] **Mukonzyanyo ngooyu, eeli bbala lyapangwa ngu: "tico".** For example, this made-up word is: "tico".

[point to the word "bino"] **Atutalike kubala: Ndalomba kobala bbala eeli.** Let's practice: Please read this word.

✓🗣 **Cabota. Eeli bbala lyabambwa ngu "bino."** Good, This made-up word is "bino."

✖🗣 **Eeli bbala lyabambwa ngu "bino."** This made-up word is "bino."

[point to the word "maba"] **Lino atusoleke kubala limbi bbala: Ndalomba ubale bbala eeli.** Now let us try another one. Please read this word.

✓🗣 **Cabota, eeli bbala lyabambwa ngu "maba."** Good, This made-up word is "maba."

✖🗣 **Eeli bbala lyabambwa ngu "maba."** This made-up word is "maba."

[point to first word] **Ndaamba kuti "talika", utalikile waawa, ubale peeji yoonse. Kotondeka ibbala lyomwe- lyomwe, akulibala cakwaambisya. Ubale cakufwambaana alimwi mukabotu-kabotu mbuli mbokonzya. Kuti naa wajana ibbala ndyotakozyi kubala, utaleki, ubale ibbala litobela. Kobikka kanwe kako abbala lyakutaanguna.Sena walibambila? Talika.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

Start the timer when the child reads the first word.

➲If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect
( ]) Mark the final word read with a bracket

Examples: tico bino maba

1	*2*	*3*	*4*	*5*	
beci	digi	cojo	miju	pumi	*(5)*
tesa	wemo	mezo	dato	jego	*(10)*
keda	mbapi	jujwe	syoga	zyacu	*(15)*
tuŋo	zyebu	aaju	lanu	mwaave	*(20)*
yuko	mwepu	nyehe	nooze	nguva	*(25)*
pato	ngizu	sade	pumo	mbagu	*(30)*
mipo	bbepu	linze	wiba	ndebwa	*(35)*
mwaave	nuwa	dabe	ganya	fiye	*(40)*
eedu	goozwa	bwado	kkedi	wimyi	*(45)*
duwe	weta	myami	masufo	zanji	*(50)*

✍ Time remaining on stopwatch at completion (number of SECONDS)

✍ Exercise discontinued because the child had no correct answers in the first line	
✍ Time remaining on stopwatch at completion (number of SECONDS)	

Wacita kabotu! Atuunke kucibeela citobela. Good effort! Let's go on to the next section

Sub-test 5. ORAL READING PASSAGE	🕐60 seconds	**Sub-test 6. READING COMPREHENSION**	
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child. Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question.	
🗣**Nceeci caano cifwaafwi nceyanda kuti ubale cakwaambisya alimwi mukabotu-kabotu cakufwaambaana. Mbotimanine buyo, ndilakubuzya mibuzyo imwi izwa mucaano ncicona eeci ncoobala. Ndaamba kuti "talika", ucibale kabotu caano mbuli mbokonzya. Naa kuti ujane ibbala ndyotakonzyi kubala, utaimi pele uunke kumbele akubala bbala litobela ndyokonzya. Kobikka kanwe kako abbala lyakutaanguna. Sena walibambila? Talika.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	✋If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions. If a child says, "I don't know," mark as incorrect.	🗣**Lino ndiyanda kukubuzya mibuzyo misyoonto iizwa mucaano ncoobala. Soleka kupa bwiinguzi bubotu mbuli mbokonzya. Ulakonzya kupa bwiinguzi kumibuzyo mumulaka ngoyanda omwini.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer.	
✍ (/) Mark any incorrect words with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket		✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.	
		Questions [Answers]	

Chilumba wakali kukkala abazyali bakwe.	05	**1. Ino Chilumba wakali kukkala abani?** (Bazyali bakwe)	1	0	.
Bausyi Chilumba bakali bazubi banswi.	10	**2. Bausyi Chilumba bakali kubeleka mulimo nzi?** (Kuzuba nswi)	1	0	.
Bumwi buzuba bakamuka kulya nsima yamasiku. Chilumba wakali kumvwa ŋonzi mpoona wakoona katana kusamba mumaanza.	25	**3. Nkaambo nzi Chilumba ncaakoona katasambide mumaanze?** (Nkaambo wakamvwide ŋonzi)	1	0	.
Kununka kwanswi mumaanza a Chilumba kwakaletelezya tunyenyeene.	32	**4. Ninzi cakaletelezya tunyenyeene muŋanda?** (Kununka kwanswi)	1	0	.
Tunyenyeene twakamuluma Chilumba. Chilumba wakalila. Bazyali bakwe bakabuka. Bakatutanda tunyenyeene kubelesya twe. Kuzwa buzuba oobo, Chilumba wakaiya ciiyo. Lyoonse wakali kusamba mumaanza amana kulya.	56	**5. Uyeeya kuti ninzi cakapa kuti Chilumba alile naakamana kulumwa tunyenyeene?** (Nkaambo wakali kumvwa kucisa)	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued: the child had no correct answers in the first line	

Wacita kabotu! Atuunke kucibeela citobela. Good effort! Let's go on to the next section

Sub-test 7. ENGLISH VOCABULARY	Materials: a sheet of paper, pencil, rubber	x

(/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect

A. **Body Parts:**

Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese: "**nose"** Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice: "nose"*
(Point to your nose so that you model for the student)
"**head"** Wait for the child to gesture to his/her head.
Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.

Shoulder	eye	back	Knee	ear	foot	finger	chin

Part A Total Correct /8

B. Words from the Environment:

Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa. *Now I will say other words and you will show me examples of those words*.

pencil	floor	Paper	rubber	desk	shoes

Part B Total Correct /6

C. Spatial Words

Tenga phensulo iyi. (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil*. *You will place the pencil where I tell you to put it. Put the pencil…*

Place a pencil and sheet of paper side by side in front of the student.

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct	/6
Overall Total Correct = (Part A + Part B + Part C)	/20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH	🕮X			🕐 X
🗣**Ndilakubalila caano cifwaafwi, ciindi comwe mu Cikuwa, mpoonya ndamana kubala, ndakubuzya mibuzyo imwi. Ndakulomba uswiilisyisye kabotu-kabotu , kutegwa upe bwiinguzi bubotu kumibuzyo mbuli mbocikonzya. Ulakonzya kupa bwiinguzi kumibuzyo mumulaka ngoyanda omwini. Sena walibambila? Atutalike.**I am going to read you a short story aloud ONCE in Englishand then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says, "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, Jane and David wrote a test in school. Jane passed the test. David did not pass the test. The teacher gave Jane new storybooks. David was not happy. David started to do his homework every evening.				
1. What grade are David and Jane doing? (Grade 2)	1	0	.	
2. What does Jane do every evening? (Jane does his homework every evening)	1	0	.	
3. What does David like doing? (sleeping)	1	0	.	
4. What did the teacher give to Jane? (new storybooks)	1	0	.	
5. What did David start doing every evening? (David started doing his homework)	1	0	.	

2018 BASELINE EGRA TOOL: CINYANJA

Cinyanja/Zambia Grade 2 Reading Assessment: Student Response Form Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Wauka bwanji. Dzina langa ndine……..ndipo ndimakhala ku……..Ndingakonde kukuuza za umoyo wanga. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.

[Number and ages of children; favourite sport, radio or television program, etc.]

1. Kodi umakonda kucita ciani ngati siuli mu sukulu? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Kodi ndi masewera otani amene umakonda kusewera?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Ndifuna kukuuza cifukwa cake ndabwera kuno lero. Ndimagwira nchito mu unduna wa maphunziro mu Zambia ndipo tikufuna kumvetsetsa mmene ana amaphunzirira kuwerenga ndi kucita masamu. Iwe wasankhidwa mwamwai. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Ife tifuna thandizo lako pa nkhaniyi. Koma iwe suyenera kutengako mbali ngati sufuna. We would like your help in this. But you do not have to take part if you do not want to.

Ife tidzacita masewero a kuwerenga . Ine ndidzakufunsa kuwerenga malembo,masilabe, mau ndi ka nkhani kocepa mokweza mau. Ndidzakufunsanso k kuwerenga ndi kuyankha mafunso ocepa. We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.

Mwakugwiritsa nchito koloko ili, ndidzaona nthawi imene utenga kuti utsirize nchito zoperekedwa. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Zimene tidzacita pano si mayeso ndipo sizidzakhudza magiredi ako pasukulu lino. This is NOT a test and it will not affect your grade at school.

Ndidzakufunsanso mafunso ena onena za banja lako monga kuti ndi cilankhulo citi cimene banja lako limagwiritsa nchito ndipo ndi zimene banja lako liri nazo. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

Sindidzalemba dzina lako ndipo palibe aliyense adzadziwa za mayankho ako. I will NOT write down your name so no one will know these are your answers.

Kaciwirinso, sungatengeko mbali ngati sufuna kutero. Tikayamba kufunsa mafunso, ngati sufuna kuyankha funso ungakhale cete, zili bwino cabe. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.
Kodi uli ndi mafunso alionse? Do you have any questions?
Kodi wakonzeka kuti tiyambe? Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

Sub-test 1. LISTENING COMPREHENSION	🕮 **X**			🕐 **X**
🗣 **Ndidzakuwerengera ka nthano/nkhani mokweza KAMODZI ndipo pambuyo pake ndidzakufunsa mafunso. Conde umvetsere mosamalitsa ndipo uyankhe mafunso mmene ungakwanitsire. Ungayankhe mafunso mcilankhulo ciriconse cimene ukonda.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				
Woimba anali kupita kukaimba kunyumba ya mfumu. Mikango yambiri inali kukhala mnjira yopita kunyumba ya mfumu. Mnjira, woimba anakumana ndi mkango wolusa. Woimba anayamba kuliza banjo. Mkango unagona. Mkango waciwiri naonso unagona. Pamene woimba anakumana ndi mkango wacitatu, anayamba kuimba banjo koma mkango unapitiliza kufendera pafupi. Woimba anacunguluka ndi kuthawa. Anthu amalo aja anamuuza kuti mkango uyu siunali kumva.				
1. Kodi woimba anali kupita kuti? (kunyumba ya mfumu)	1	0	.	
2. Kodi ndi nyama zotani zomwe zinali kukhala mnjira yopita kunyumba ya mfumo? (mikango)	1	0	.	
3. Kodi ndi ciani cimene cinacitika ku mikango iwiri yoyamba pamene woimba analiza banjo lake? (mikango inagona)	1	0	.	
4. Kodi mkango wacitatu unacita ciani pamene woimba analiza banjo? (mkango unapitiliza kufendera pafupi ndi woimba	1	0	.	

5. Cifukwa mkango wacitatu sunamve kulira kwa banjo ya woimba ? (mkango sunamve ciri conse /unali wogontha)	1	0	.	

Wacita bwino! Tiye tipitirize patsamba lotsatira Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION

📖 **Page 1**

🕐 60 seconds

🗣 **Pano ndili ndi tsamba limene liri ndi malembo a alifabeti ya mucingerezi. Conde ndiuze MVEKERO za malembo a alifabeti amene udziwa. Usanene maina ake. Koma mvekero zake.** Here is a page full of letters of the Chinyanja alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not their names, but their sounds.

[point to the letter A] **Mwacitsanzo, mvekero la lembo ili ndi /a/.** For example, the sound of this letter is /a/.

[point to the letter p] **Tiye tiyeserere: ndiuze mvekero la lembo ili:** Let's practice: Tell me the sound of this letter.

✔🗣 **Cabwino, mvekero la lembo ili ndi /p/** Good, the sound of this letter is /p/.

✘🗣 **Mvekero la lembo ili ndi /p/** The sound of this letter is /p/.

[point to the letter L] **Tsopano tiye tiyese lembo lina. Ndiuze mvekero la lembo ili.** Now let us try another one. Tell me the sound of this letter.

✓🗣

Cabwino, mvekero la lembo ili ndi /L/. Good, the sound of this letter is /L/.

✘🗣

Mvekero la lembo ili ndi /L/. The sound of this letter is /L/.

[point to first letter] **Ndikanena kuti "tiyambe", uyambire apa ndi kupitiriza mopingasa tsamba ili. Lata ku lembo lirilonse ndipo ndiuze mvekero la lembo limenelo mmau okweza. Ngati wafika pa lembo limene sudziwa, pitiriza kupita ku lembo lotsatira. Ika cala cako pa limbo loyamba. Wakonzeka? Yamba.** When I say "Begin," start here and go across the page. Point to each letter and tell me the sound of that letter in a loud voice. Read as quickly and carefully as you can. If you come to a letter you do not know, go on to the next letter. Put your finger on the first letter. Ready? Begin.

Start the timer when the child reads the first letter.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and

✍ (/) Mark any incorrect letters with a slash
(Ø) Circle self-corrections if you already marked the letter incorrect
( ]) Mark the final letter read with a bracket

Examples: A p L

1	2	3	4	5	6	7	8	9	10		go on to the next subtask.
I	N	u	J	d	A	m	k	m	K	*(10)*	
A	d	w	K	L	U	I	C	o	b	*(20)*	
e	n	g	s	A	D	G	a	I	E	*(30)*	
a	r	A	T	v	i	l	f	W	A	*(40)*	
L	Y	a	N	M	A	D	a	t	i	*(50)*	
N	u	O	i	k	N	t	I	e	z	*(60)*	
i	Z	l	U	M	i	u	N	P	i	*(70)*	
a	p	M	k	B	T	A	W	c	A	*(80)*	
m	w	a	E	A	a	R	a	h	N	*(90)*	
A	n	S	U	O	T	l	n	o	a	*(100)*	

✎ Time remaining on stopwatch at completion (number of SECONDS)	
✎ Exercise discontinued because the child had no correct answers in the first line	

Sub-test 3. Syllable Fluency	**Page 2**	60 seconds
🗣 **Pano ndili ndi tsamba limene liri ndi masilabe ya m'Cinyanja. . Conde ndiwerengere masilabe amene ungakwanitse kuwerenga.** Here is a page full of syllables. Please read as many syllables as you can. [point to the syllable /ma] **Mwacitsanzo, silabe ili ndi /ma/.** For example, the sound of this syllable is /ma/. [point to the syllable /si/] **Tiye tiyeserere: ndiuze silabe ili /si/:** Let's practice: Read this syllable. ✓🗣 **Cabwino, silabe ili ndi /si /** Good, this syllable is /si/. ✗🗣 **Silabe ili ndi /si/** This syllable is /si/. [point to the syllable /fu/] **Tsopano tiye tiyese silabe lina. Ndiuze silabe ili /fu/.** Now let us try another one. Read this syllable. ✓🗣 **Cabwino, silabe ili ndi /fu/.** Good, this syllable is /fu/. ✗🗣 **Silabe ili ndi /fu/.** This syllable is /fu/. [point to first syllable] **Ndikanena kuti "tiyambe", uyambire apa ndi kupitiriza mopingasa tsamba ili. Lata ku lembo lirilonse ndipo ndiuze silabe limenelo mmau okweza. Ngati wafika pa silabe limene sudziwa, pitiriza kupita kusilabe lotsatira. Ika cala cako pa silabe loyamba. Wakonzeka? Yamba.** When I say "Begin," start here and go across the page. Point to each syllable and say that syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot say, go on to the next one. Put your finger on the first syllable. Ready?		Start the timer when the child reads the first syllable. ➲ If a child hesitates or stops on a syllable for 3 SECONDS, point to the next syllable and say "Go on" ✋ When the timer reaches 0, say "stop." ✋ If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the
✎ (/) Mark any incorrect syllalbes with a slash (Ø) Circle self-corrections if you already marked the syllable incorrect		

( ]) Mark the final syllable read with a bracket

Examples: ma si fu

bottom, and go on to the next subtask.

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
le	fi	mwa	se	ye	ndi	ni	fa	zi	da	*(10)*
dzi	cu	nyu	ba	zo	la	bu	ka	yu	ti	*(20)*
vi	tsi	mi	nze	wa	pe	ki	nya	pi	go	*(30)*
fu	nda	pa	ga	ri	ntha	nja	be	to	nga	*(40)*
na	de	ma	di	co	thi	ra	zu	we	mo	*(50)*
do	za	ne	bwa	bi	ngwa	ngi	ku	su	nkhwa	*(60)*
mba	ngu	po	wi	mwa	nsha	le	so	gu	si	*(70)*
nu	ko	li	sa	no	ya	du	mpe	nzi	ce	*(80)*
nsa	re	ke	ntho	vu	nye	me	te	o	nde	*(90)*
tu	yo	nsi	mu	mphu	njo	wu	mtsi	lu	mtsu	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Sub-test 4. NON-WORD READING | **Page 2** | 60 seconds

🗣 **Pano pali mau opangidwa mcinyanja. Ndifuna kuti uwerenge mau amene ungakwanitse kuwerenga, Uwerenge mau awa osati masipeling'i.** Here are some made-up words in Chinyanja. I would like you to read as many as you can. Do not spell the words but read them.

[point to the word "oli"] **Mwacitsanzo, liu lopangidwa ili ndi: "oli"** For example, this made-up word is: "oli".

[point to the word "koki"] **Tiye tiyeserere: conde werenga liu ili.** Let's practice: Please read this word.

✓🗣 **wacita bwino. Liu ili ndi "koki"** Good, This made-up word is "koki."

✗🗣 **Liu lopangidwa ili ndi "koki"** This made-up word is "koki."

[point to the word "cota"] **Tsopano tiye tiyese liu lina: conde werenga liu ili:** Now let us try another one. Please read this word.

✓🗣 **"wacita bwino, liu lopangidwa ili ndi "cota"** Good, This made-up word is "cota."

✗🗣 **Liu lopangidwa ili ndi "cota"** This made-up word is "cota."

[point to first word] **Ndikanena kuti "yamba" uyambire pano ndipo uwerenge mopingasa patsamba ili. Lata liu lirilonse ndipo uliwerenge mokweza. Uwerenge mofulumira ndi mosamala mmene ungakwanitsire. Ngati wapeza liu limene sudziwa, pita ku liu lotsatira. Ika cala cako pa liu loyamba. Wakonzeka? Yamba.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

Start the timer when the child reads the first word.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect words with a slash

(Ø) Circle self-corrections if you already marked the word incorrect

( ]) Mark the final word read with a bracket

Examples: oli koki cota

1	*2*	*3*	*4*	*5*	
ngofu	kanjo	yesima	gota	rampi	*(5)*
redige	tapiku	nobwi	diko	nsakudu	*(10)*
khaye	nemepa	mvaki	lagwiku	ngakwa	*(15)*
tanjo	onja	luge	zasi	mpotu	*(20)*
aluki	ukalu	sopi	ungapi	sobeti	*(25)*
anauna	cofukwa	kubu	udi	mtisinaka	*(30)*
amoi	wera	diko	eka	kasuci	*(35)*
komi	ateta	nacho	lia	labo	*(40)*
nthua	menepa	ndaako	ncheto	balo	*(45)*

mtingi mtanyama ndokonda mtutu ko *(50)*	
✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Wacita bwino! Tiye tipitirize patsamba lotsatira Good effort! Let's go on to the next section.

Sub-test 5. ORAL READING PASSAGE	🕐 60 seconds	Sub-test 6. READING COMPREHENSION
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child.
🗣 **Pano pali nthano yayifupi. Ndifuna kuti uwerenge mokweza, mofulumira komanso mosamala. Ukatsiriza kuwerenga, ndizakufunsa mafunso onena za nkhani imene wawerenga. Ndikanena kuti " yamba," uwerenge bwino kwambiri mmene ungakwanitsire. Ngati wapeza liu limene sudziwa, pita ku liu lotsatira. Ika cala cako pa liu loyamba. Wakonzeka? Yamba.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	✋ If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions. If a child says, "I don't know," mark as incorrect.	Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question. 🗣 **Tsopano ndidzakufunsa mafunso ocepa onena za nthano imene wawerenga. Yesa kuyankha mafunso mmene ungakwanitsire. Ungayankhe mafunso mcilankhulo ciriconse cimene ukonda.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer.
✍ (/) Mark any incorrect letters with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket		✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.

		Questions [Answers]			
Masiye anali mu Geredi 2.	5	**1. Ndani anali mu Geredi 2?** (Masiye)	1	0	.
Sukulu la Masiye linali kusidya la mtsinje. Kuti afike kusukulu, Masiye anali kuyenera kudunsa ulalo.	20	**2. Kodi sukulu la Masiye linali kuti?** (Kusidya kwa mtsinje)	1	0	.
Tsiku lirilonse, Masiye anadunsa ulalo ndi mnzake Izeki.	28	**3. Kodi Masiye anadunsa ulalo ndi yani?** (Izeki)	1	0	.
Tsiku lina, Izeki sanapite kusukulu. Masiye amakonda kuphunzira ndi kusewera masewera a mpira kusukulu.	42	**4. Kodi Masiye amakonda kucita ciani kusukulu?** (Kuphunzira ndi kusewera masewero a mpira)	1	0	.
Tero , anadunsa ulalo yekha kupita kusukulu.	48	**5. Kodi cifukwa ciani Masiye anapita kusukulu yekha?** Izeki sanapite kusukulu)	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	

✍ Exercise discontinued: the child had no correct answers in the first line	

Wacita bwino! Tiye tipitirize patsamba lotsatira Good effort! Let's go on to the next section.

Sub-test 7. ENGLISH VOCABULARY

Materials: a sheet of paper, pencil, rubber

x

(/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect

A. **Body Parts:**

Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese: "**nose"** Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice: "nose"*
(Point to your nose so that you model for the student)
"**head"** Wait for the child to gesture to his/her head.
Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.

Shoulder eye back knee ear foot finger chin

Part A Total Correct /8

B. Words from the Environment:

Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa. *Now I will say other words and you will show me examples of those words*.

pencil	floor	paper	rubber	desk	shoes

Part B Total Correct /6

C. Spatial Words

Tenga phensulo iyi. (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil*. *You will place the pencil where I tell you to put it. Put the pencil…*

Place a pencil and sheet of paper side by side in front of the student.

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct /6

Overall Total Correct = (Part A + Part B + Part C) /20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH	🕮 X			🕐 X
🗣 **Ndidzakuwerengera ka nthano/nkhani mcigerezi mokweza KAMODZI ndipo pambuyo pake ndidzakufunsa mafunso. Conde umvetsere mosamalitsa ndipo uyankhe mafunso mmene ungakwanitsire. Ungayankhe mafunso mcilankhulo ciriconse cimene ukonda.** I am going to read you a short story aloud ONCE in English and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				Do not allow the child to look at the passage or the questions.
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, Jane and David wrote a test in school. Jane passed the test. David did not pass the test. The teacher gave Jane new story books. David was not happy. David started to do his homework every evening.				If a child says, "I don't know," mark as incorrect.
1. What grade are David and Jane doing? (Grade 2)	1	0	.	
2. What does Jane do every evening? (Jane does his homework every evening)	1	0	.	
3. What does David like doing? (sleeping)	1	0	.	
4. What did the teacher give to Jane? (new story books)	1	0	.	
5. What did David start doing every evening? (David started doing his homework)	1	0	.	

2018 BASELINE EGRA TOOL: ICIBEMBA

Icibemba/Zambia Grade 2 Reading Assessment: Student Response Form Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Uli shani. Ishina lyandi nine_____njikala _____. Nomba ndefwaya ukuilondololako panoono. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.
[Number and ages of children; favourite sport, radio or television program, etc.]

1. Finshi watemwa ukucita ilyo ushili ku sukulu? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Fyangalonshi watemwa ukwangala ilyo uli pa mushi?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Leka nomba nkwebe ico njishile kuno leelo. Ine nafuma ku ciputulwa ca masambililo muno caalo umo tuleyesha ukwishiba ifyo abasambi basambilila ukubelenga. Iwe naukwata ishuko lyaku kusala pa kusendamo ulubali. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Tulefwaya utwafweko mulifi. Nomba ngataulefwaya ukuti usendemo ulubali, tatulekupatikisha kuti wakaana nga ulefwaya. We would like your help in this. But you do not have to take part if you do not want to.

Twalayangala ubwangalo bwa kubelenga. Nalakwipusha ukubelenga ifilembo, amashiwi na kalyashi akepi mu kwikatisha ishiwi. We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.

Twalabomfya inkoloko iyi, twalamona inshita calatusendela pakuti tupwishe uyu mulimo. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Aya temashindano iyoo, kabili tayakakume ku mibombele yoobe ku sukulu. This is NOT a test and it will not affect your grade at school.

Kabili nalakwipushako ameepusho yambi ayapa lupwa loobe ifili nga ululimi ulupwa loobe lulanda pa ng'anda nafimbi ifyo ulupwa lwakwata pang'anda. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

Nshalembe ishina lyobe, kabili takwakabe uukeshiba amasuko yoobe. I will NOT write down your name so no one will know these are your answers.

Nakabili, tapali uwalakupatikisha ukusendamo ulubali ngataulefwaya. Ngatwatampa, nga ulefwaya teti wasuke ilipusho nangu limo ninshi cilifye bwino. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.
Naukwata ameepusho? Do you have any questions?
Nauipekanya ukuti tutampeko? Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

Eya cawama waesha! Katuleya ku cipande ca konkapo. Good effort! Let's go on to the next section.

Sub-test 1. LISTENING COMPREHENSION	🕮 X	🕐 X
🗣 **Nalakubelengela ilyashi iliipi kabili mukwikatisha ishiwi UMUKU UMO elyo nkwipushepo ameepusho. Umfwikishe elyo wasuke amepusho nalakwipusha bwino-bwino. Kuti wayasuka ameepusho mu lulimi ulo wingafwaya ukubomfya. Nauipekanya? Katutampe.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.		Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.		
Keemba wanyimbo aleeya kwisano mukwimba. Munshila mwali inkalamo ishingi. Keemba akumenye inkalamo iikalali saana. Atampile ukulisha akalimba. Inkalamo yaliponene mutulo. Kabili keemba akonkenyepo ubulendo. Akumenye inkalamo yacibili. Na kabili alishishe akalimba. Nayo yaliponene mutulo. Keemba akumenye inkalamo yabutatu. Kabili atampile ukulisha akalimba. Lelo inkalamo yakonkenyepofye ukwisa uko aali. Keemba alipilibwike nokubutuka ulubilo. Abantu bamwebele ukuti iyo inkalamo ni nkoma matwi.		

Bushe keemba aleeya kwi? (kwisano lyamfumu)	1	0	.	
Ninama nshi shaleenda munshila yakwisano lyamfumu? (Inkalamo)	1	0	.	
Finshi fyacitike ku nkalamo shibili ishakubalilapo ilyo keemba alishishe akalimba kakwe? (Shaponene mutulo/ shali sendama/ shali laala)	1	0	.	
Cinshi inkalamo yabutatu yacitile ilyo keemba alishishe akalimba kakwe? (ikalamo yakonkenyepo ukwisa uko aali)	1	0	.	
Mulandu nshi inkalamo yakanine ukulaala panuma yakulisha akalimba? (inkalamo tayaumfwile nangu cimo/ yali ni nkoma matwi)	1	0	.	

Eya cawama waesha! Katuleya ku cipande ca konkapo. Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION	🕮 **Page 1**	🕐 60 seconds

🗣 **Ili ipepala nalikwata ifilembo ifili mu alufabeti wa Cibemba. Nomba njebako ifiunda fya ifi filembo, ulande fyonse ifyo wiishibe. Ibukisha ukuti temashina yalefwaikwa iyoo, leelo fiunda.** Here is a page full of letters of the Cibemba alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not their names, but their sounds.

[point to the letter T] **Icilangililo, iciunda cacilembo ici t, ni /t/**
For example, the sound of this letter is /t/.

[point to the letter M] **Natweshe ukucita ifi: Njebako iciunda ca cilembo ici:** Let's practice: Tell me the sound of this letter.

Eya cawama, iciunda ca cilembo ici ni /m/. Good, the sound of this letter is /m/.

✓🗣 **Iciunda ca cilembo ici ni /m/.** The sound of this letter is /m/.

✖🗣

[point to the letter S] **Nomba natwesha icilembo cimbi: Njebako iciunda ca cilembo ici.** Now let us try another one. Tell me the sound of this letter.

✓🗣 **Eya cisuma, iciunda ca cilembo ici ni /s/.** Good, the sound of this letter is /s/.

✖🗣 **Iciunda ca icilembo ici ni /s/.** The sound of this letter is /s/.

[point to first letter] **Nganati "tampa", utampe mpaka upwishe ipepala lyonse. uleesonta pali cila cilembo na ukunjeba iciunda ca cilembo mu kwikatisha ishiwi. Ubelenge mukwangufyanya kabili busaka-busaka. Ngawasanga icilembo ushishibe, wikokolapo konkanyapo ukwabula ukupoosa inshita kabiye pa cilembo cakonkapo. Biika umunwe pa cilembo ca kubalilapo.**
Nauipekanya? Tampako. When I say "Begin," start here and go across the page. Point to each letter and tell me the sound of that letter in a loud voice. Read as quickly and carefully as you can. If you come to a letter you do not know, go on to the next letter. Put your finger on the first letter. Ready? Begin.

Start the timer when the child reads the first letter.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect letters with a slash

(Ø) Circle self-corrections if you already marked the letter incorrect

( ]) Mark the final letter read with a bracket

Examples: t m s

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
e	p	W	b	F	L	t	a	u	a

A	k	o	U	a	B	i	E	s	e
l	M	P	Y	F	c	u	a	N	L
K	ŋ	i	a	i	A	s	L	M	a
A	u	m	o	K	t	U	i	n	u
s	E	b	u	a	n	a	O	E	a
a	T	A	M	L	S	m	ŋ	b	n
w	u	l	B	u	c	i	N	t	I
a	I	a	N	i	m	w	a	L	k
n	M	A	P	A	O	a	y	U	A

Time remaining on stopwatch at completion (number of SECONDS)

Exercise discontinued because the child had no correct answers in the first line

Eya cawama waesha! Katuleya ku cipande cakonkapo. Good effort! Let's go on to the next section.

Sub-test 3. SYLLABLE FLUENCY | **Page 2** | 60 second

🗣 **Ili ipepala nalikwata ifilembo. Nomba belenga ifilembo fyonse ifyo wiishibe. Ibukisha.** Here is a page full of syllables. Please read as many syllables as you can.

[point to the syllable /na/] **Icilangililo, icilembo ici, ni /na/** For example, this syllable is /na/.

[point to the syllable /na/] **Natweshe ukucita ifi: Njebako icilembo ici:** Let's practice: Tell me this syllable.

✓🗣 **Eya cawama, icilembo ici ni /ba/.** Good, this syllable is /ba/.

✗🗣 **icilembo ici ni /ba/.** This syllable is /ba/.

[point to the syllable /mu/] **Nomba natweshe icilembo cimbi: Njebako icilembo ici.** Now let us try another one. Tell me this syllable.

✓🗣 **Eya cisuma, ca icilembo ici ni /mu/.** Good, this syllable is /mu/.

✗🗣 **icilembo ici ni /mu/.** This syllable is /mu/.

[point to first syllable] **Nganati "tampa", utampe mpaka upwishe ipepala lyonse. Uleesonta pali cila cilembo na ukunjeba cilembo mu kwikatisha ishiwi. Ubelenge mukwangufyanya kabili busaka-busaka. Ngawasanga icilembo ushishibe, wikokolapo konkanyapo ukwabula ukupoosa inshita kabiye pa cilembo cakonkapo. Biika umunwe pa cilembo ca kubalilapo. Nawipekanya? Tampako.** When I say "Begin," start here and go across the page. Point to each syllable and say that syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot say, go on to the next one. Put your finger on the first syllable. Ready? Begin.

Start the timer when the child reads the first syllable.

➲ If a child hesitates or stops on a syllable for 3 SECONDS, point to the next syllable and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect syllable with a slash

(Ø) Circle self-corrections if you already marked the syllable incorrect

( ]) Mark the final syllable read with a bracket

Examples: na ba mu

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
le	fi	mpwa	se	mfu	pa	ni	ta	ci	ya	*(10)*
pa	fya	nyu	sa	ko	ce	bu	mwe	ndwa	ngu	*(20)*
chi	lwe	mbi	ntwe	wa	pe	ka	mfya	twa	nshi	*(30)*
fwa	nda	shi	fya	mwe	sha	ngwa	be	to	Ng'a	*(40)*
nu	nje	ma	lyo	la	mba	nko	zu	we	mo	*(50)*
ca	fa	mpwe	mpa	mfi	pa	tye	ta	ku	ya	*(60)*
pa	fya	nyu	ntwe	ko	ce	bu	se	ndwa	ngu	*(70)*
mbi	lwe	chi	yo	wa	pe	ka	mfya	twa	nshi	*(80)*
fwa	nda	shi	fya	mwe	sha	ngwa	be	ndya	tu	*(90)*
nu	nje	ma	lyo	la	mba	nko	fwa	we	mo	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS) ____

✍ Exercise discontinued because the child had no correct answers in the first line ☐

Eya cawama waesha! Katuleya ku cipande cakonkapo. Good effort! Let's go on to the next section.

Sub-test 4. NON-WORD READING | **Page 3** | 60 seconds

🗣 **Apa pali amashiwi ayakupangafye ayashilepilibula nangu ciimo mu Cibemba. Ndefwaya ukuti ubelenge aya mashiwi yonse ayo wingabelenga. Wilalumbula ifilembo cimo-cimo iyoo kanofye ukubelenga ishiwi lyonse.** Here are some made-up words in Icibemba. I would like you to read as many as you can. Do not spell the words, but read them.

[point to the word "opa"] **Icilangililo: Ili ishiwi lyapangwa ilyakuti: "opa".** For example, this made-up word is: "opa".

[point to the word "toti"] **Natweshe nomba: belenga ili shiwi.** Let's practice: Please read this word.

✓🗣 **Eya cawama, ili ishiwi ni "toti".** Good, this made-up word is "toti."

✗🗣 **Ili ishiwi lyakupangafye "toti" talipilibula nangu cimo.** This made-up word is "toti."

[point to the word "maba"] **Nomba esha nalimbi: Belenga nalimbi ishiwi ili.** Now let us try another one. Please read this word.

✓🗣 **Ciisuma, ili ishiwi lyaku pangafye ni "maba".** Good, this made-up word is "maba."

✗🗣 **Ili ishiwi lyaku pangafye ni "maba".** This made-up word is "maba."

[point to first word] **Ilyo ndetiila "Tampa" utampile apa no kubelenga yonse ayali pepepala lyonse. Uleesonta pali cila ishiwi na ukubelenga ukwikatisha ishiwi. Belenga mukwangufyanya kabili mu mutekatima. Ngawasanga ishiwi ushishibe wikokolapo uye palikonkelepo. Sonta peeshiwi lyaku balilapo. waipekanya? Tampako.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

Start the timer when the child reads the first word.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect
( ]) Mark the final word read with a bracket

Examples: opa toti maba

1	*2*	*3*	*4*	*5*	
cibu	yotu	mete	yaka	moti	*(5)*
nano	sefi	luta	paso	lepo	*(10)*
ceko	noya	puya	wipo	nomu	*(15)*
liko	fubi	kwipa	manti	lando	*(20)*
wace	mawi	lyoma	pebwa	nguya	*(25)*
ndwe	kwili	imwa	keshi	muuyo	*(30)*
senso	mweti	twape	ekwe	laaku	*(35)*
tashu	yatwe	nuunu	feeka	bundo	*(40)*
twayo	nyeme	nino	shanu	mwako	*(45)*

bwabe tanwe tuto kiko bita *(50)*		
✍ Time remaining on stopwatch at completion (number of SECONDS)		
✍ Exercise discontinued because the child had no correct answers in the first line		

Eya cawama waesha! Katuleya kucipande cakonkapo. Good effort! Let's go on to the next section.

Sub-test 5. ORAL READING PASSAGE	🕐 60 seconds	**Sub-test 6. READING COMPREHENSION**
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child. Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question.
🗣 **Aka akalyashi keepi. Ndefwaya ukuti ubelenge ukwikatisha ishiwi mu mutima-nteka kabili bwangu-bwangu. Nga wapwisha ukubelenga nalakwipusha ameepusho pa lyashi walabelenga. Nganati "Tampa", walabelenga akalyashi busaka-busaka. Nga wasanga ishiwi ushishibe wikokolapo kabiye peeshiwi limbi. Sonta peeshiwi lyaku balilapo. Nauipekanya? Tampako.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	✋ If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions. If a child says "I don't know," mark as incorrect.	🗣 **Nomba nalakwipusha ameepusho ayanoono peelyashi wabelenga. Weshe ukwasuka ameepusho ayo wingeshiba bwino-bwino. Kuti wayasuka ameepusho mu lulimi wingafwaya ukubomfya.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer.
✍ (/) Mark any incorrect letters with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket		✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.

		Questions [Answers]			
Inkoko yakwa Mwewa yaletoota bwino <u>amani.</u>	6	**1. Busuma nshi inkoko yakwa Mwewa yakwete?** (yaletoota bwino)	1	0	.
Umweshi wapwile yakwete utwana <u>20.</u>	11	**2. Bushe inkoko yakwa Mwewa yakwete utwana tunga?** (20)	1	0	.
Pungwa alesompola utwana twa nkoko. Bushiku bumo, inkoko yakonkele pungwa mu muulu nokupokolola akaana.	25	**3. Buubi nshi pungwa akwete?** (Ukusompola utwana twankoko)	1	0	.

Panuma yakumona ifi, Mwewa akulile icitele. Umu mwakusungila utwana twa nkoko. Utwana twalikulile ukusanguka inkoko ishikalamba.	41	**4. Finshi Mwewa acitile pakucingilila utwana twa nkoko?** (Akulile icitele)	1	0	.
Pungwa aliifulilwe.	43	**5. Cinshi calengele pungwa afulwe?** (Takwete umusansago wakusompwelamo utwana twa nkoko)	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued: the child had no correct answers in the first line	

Eya cawama waesha! Katuleya ku cipande cakonkapo. Good effort! Let's go on to the next section.

Sub-test 7. ENGLISH VOCABULARY		Materials: a sheet of paper, pencil, rubber	x
	(/) Mark any incorrect words with a slash (Ø) Circle self-corrections if you already marked the word incorrect		
A.	**Body Parts:**		
	Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese: "**nose"** Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice: "nose"* (Point to your nose so that you model for the student) "**head"** Wait for the child to gesture to his/her head. Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.		
	Shoulder eye back knee ear foot finger chin		
		Part A Total Correct	/8
B.	**Words from the Environment:**		
	Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa. *Now I will say other words and you will show me examples of those words*.		
	pencil floor paper rubber desk shoes		
		Part B Total Correct	/6
C.	**Spatial Words**		
	Tenga phensulo iyi. (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil*. *You will place the pencil where I tell you to put it. Put the pencil…*	Place a pencil and sheet of paper side by side in front of the student.	

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct	/6
Overall Total Correct = (Part A + Part B + Part C)	/20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH 🕮 **X**				🕐 **X**
🗣 **Nalakubelengela akalyashi akeepi akamucisungu mu kwikatisha ishiwi UMUKU UMO elyo nkwipushe ameepusho. Umfwikishe bwino na ukwasuka ameepusho nalakwipusha mu mutima nteka. Kuti wayasuka ameepusho mu cilimi ico wingafwaya ukubomfya. Nauipekanya? Katutampe.** I am going to read you a short story aloud ONCE in English and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, Jane and David wrote a test in school. Jane passed the test. David did not pass the test. The teacher gave Jane new storybooks. David was not happy. David started to do his homework every evening.				
What grade are David and Jane doing? (Grade 2)	1	0	.	
What does Jane do every evening? (Jane does his homework every evening)	1	0	.	
What does David like doing? (sleeping)	1	0	.	
What did the teacher give to Jane? (new story books)	1	0	.	
What did David start doing every evening? (David started doing his home work)	1	0	.	

2018 BASELINE EGRA TOOL: KIIKAONDE

Kiikaonde/Zambia Grade 2 Reading Assessment: Student Response Form Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Muteende. Jiizhina ne .....Ngikala mu..... Naasaka kwiiluumbulula byo nji. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.

[Number and ages of children; favourite sport, radio or television program, etc.]

1. Inge kechi uji ku sukuulu ine, waatemwa kuuba ka? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Bisela ka byo waatemwa kukaya?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Leka nkubule kyo nayishila. Ñingila ku kipamo kya lufundo mu Zambia. Tusaka kuyuka banyike byo bafunda kutanga. Nasalululatu kwisamba ne obewa. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Tusakako bukwasho bobe. Mino inge kechi ukeba ne, wakonsha kukaana. We would like your help in this. But you do not have to take part if you do not want to.

Tusa kukaya kisela kya kutanga. Usa kuntangila bisopelo, byambo ne kajishimikila na jiwi jasansuka. We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.

Kwingijisha ino nkoloko, nsa kuyuka kuleepa kwa kimye kyo usa kutangilamo. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Aluno kechi lweseko ne. Kechi byakwatapo ku mwingilo wobe mu sukuulu ne. This is NOT a test and it will not affect your grade at school.

Nsa kukwipuzha kabiji ne pa kisemi kyobe, nobe mulaka ye mwingijisha wenu wa pa nzubo, ne bintu bimo byo muji nabyo pa nzubo. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

Kechi nsa kunemba jizhina jobe ne. Kafwako usa kuyuka amba aye mikumbu yobe ne. I will NOT write down your name so no one will know these are your answers.

Inge kechi usaka ne wakonsha kukaana. Inge twatendeka, bino wakaana kukumbulapo jipuzho jimo, kijitu bulongo. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. **Ujipo na jipuzho nyi?** Do you have any questions? **Winengezha tutatule nyi?** Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

Wiikitwa! Twaaya tuye pa kibese kyaaloondelaapo. Good effort! Let's go on to the next section.

Sub-test 1. LISTENING COMPREHENSION	🕮X	🕐 X
🗣**Nsa kukutaangila jiishimikila jiipi, JIMOOTU ne kukwiipuzhaapo meepuzho. Teelekesha buloongo ne kukuumbula meepuzho mwaafwaanyinwa. Waakoonsha kukuumbula meepuzho mu mulaka uji yeense ye ukeba. Wiineengezha nyi? Tutatule.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.		Remove the pupil stimuli booklet from the child's view.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.		Do not allow the child to look at the passage or the questions.
Kipasa kechi watemenwe sukuulu ne.Kabiji wakyelwanga ku sukuulu kimye kyonse. Kipasa wakailanga mungye pakuya ku sukuulu. Kipasa bamupangishe ku bokwe. Kipasa bamupangishe ku bokwe. Kabiji wanyemejile ku sukuulu. Bokwe pakumona baana ba sukuulu bavula, wanyemejile mungye. Pa kino kyamumwekejile Kipasa kyamulengejile kuleka kukelwa ku sukuulu.		If a child says "I don't know," mark as incorrect.

Kipasa wapachile kuuba ka? (Kuya kusukulu)	1	0	.	
Kipasa waubanga ka mungye? (Wakayanga)	1	0	.	
Juba jimo Kipasa wamwene ka mungye? (bokwe)	1	0	.	
Kipasa wanyemejile pi panyuma ya kumupangisha ku bokwe? (Ku sukuulu)	1	0	.	
Kipasa walekejile ka kukyelwa ku sukuulu? (wachinyinyenga bokwe)	1	0	.	

Wiikitwa! Twaaya tuye pa kibese kyaaloondelaapo. Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION	🕮 **Page 1**	🕐 60 seconds

🗣 **Tala pa mutaanchi wa mafumu- tulume mu Kiikaonde. Mbuule bilulumo bya ano mafumu-tulume inge waakoonsha. Kwaamba mazhina ine, mbuuleekotu bilulumo.** Here is a page full of letters of the Kiikaonde alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not their names, but their sounds.

[point to the letter A] **Kya kumweenako, kilulumo kya kino kisopela ke :/A/.** For example, the sound of this letter is /A/.

[point to the letter p]**Twaaya tweeseke. Mbuule kilulumo kya kino kisopelo.** Let's practice: Tell me the sound of this letter.

✓🗣 **Wiikitwa, kilulumo kya kino kisopelo ke /p/.** Good, the sound of this letter is /p/.

✗🗣 **Kilulumo kya kino kisopelo ke /p/.** The sound of this letter is /p/.

[point to the letter L] **Pano tweeseke kisopelo kikwaabo: Mbuule kilulumo kya kino kisopelo.**
Now let us try another one. Tell me the sound of this letter.

✓🗣 **Wiikitwa, kilulumo kya kino kisopelo ke /L/.** Good, the sound of this letter is /L/.

✗🗣 **Kilulumo kya kino kisopelo ke /L/.** The sound of this letter is /L/.

[point to first letter] **Inge na amba amba "Teendeka", teendekela pano ne kuya kwaapela kipeepala. Toongolaanga pa bisopelo ne kuumbula kilulumo kya kisopelo na jiiwi jaasaansuka.**
Inge waafika pa kisopelo kyo waaluba, kishe ne kuya pa kikwaabo. Biika munwe pa kisopelo

Start the timer when the child reads the first letter.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on"

When the timer reaches 0, say "stop."

If the child does not provide a single correct response on the

kitaanshi. Wiineengezha nyi? Tatula. When I say "Begin," start here and go across the page. Point to each letter and tell me the sound of that letter in a loud voice. Read as quickly and carefully as you can. If you come to a letter you do not know, go on to the next letter. Put your

finger on the first letter. Ready? Begin.

first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✎ (/) Mark any incorrect letters with a slash

(Ø) Circle self-corrections if you already marked the letter incorrect

( ]) Mark the final letter read with a bracket

Examples: A p L

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
n	a	l	A	m	z	w	U	n	u	*(10)*
o	K	n	f	W	a	i	G	o	i	*(20)*
L	U	I	y	B	e	F	B	A	b	*(30)*
N	E	a	s	k	I	K	O	K	u	*(40)*
u	l	k	l	M	A	t	E	I	P	*(50)*
p	n	e	y	S	v	B	k	M	v	*(60)*
U	T	i	A	k	E	i	y	N	a	*(70)*
o	Y	ñ	u	b	a	m	a	J	W	*(80)*
a	l	A	e	v	u	N	d	e	A	*(90)*
n	E	T	m	A	g	j	U	L	u	*(100)*

✎ Time remaining on stopwatch at completion (number of SECONDS)

✎ Exercise discontinued because the child had no correct answers in the first line

Wiikitwa! Twaaya tuya pa kibese kyaaloondelaapo. Good effort! Let's go on to the next section.

Sub-test 3. SYLLABLE FLUENCY | **Page 1** | 60 seconds

🗣 **Tala pa mutanchi wa mafumu- tulume mu Kikaonde. Mbule bilulumo bya ano mafumu-tulume inge wakonsha. Kwamba mazhina ne, mbuuleekotu bilulumo.** Here is a page full of syllables. Please read as many syllables as you can.

[point to the syllable bo] **Kya kumwenako, kipimvwa-kyambo kya kino ke /bo/.** For example, this syllable is /bo/.

[point to the syllable tu]**Twaya tweseke. Tanga kino kipimvwa-kyambo.** Let's practice: Read this syllable.

✓🗣 **Wikitwa, kipimvwa-kambo kya kino ke /tu/.** Good, this syllable is /tu/.

✘🗣 **Kino kipimvwa-kyambo ke /tu/.** This syllable is /tu/.

[point to the syllable] **Pano tweseke kipimvwa-kyambo: Mbule kino kipimvwa-kyambo.** Now let us try another one. Read this syllable.

✓🗣 **Wikitwa, kipimvwa-kyambo kya kino ke /ma/.** Good, this syllable is /ma/.

✘🗣 **Kino kipimvwa-kyambo ke /ma/.** This syllable is /ma/.

[point to first syllable] **Inge naamba amba "Tendeka", tendekela pano ne kuya kwapela kipepala. Tongolanga po bipimvwa-byambo ne kukumbula na jiwi jasansuka. Inge wafika pa kispimvwa-kyambo kyo waluba, kishe ne kuya pa kikwaabo. Biika munwe pa kipimvwa-kyambo kitanshi. Winengezha nyi? Tatula.** When I say "Begin," start here and go across the page. Point to each syllable and say that syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot say, go on to the next one. Put your finger on the first syllable. Ready? Begin.

Start the timer when the child reads the first syllable.

➲If a child hesitates or stops on a syllable for 3 SECONDS, point to the next syllable and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect syllables with a slash
(Ø) Circle self-corrections if you already marked the syllable incorrect
( ]) Mark the final syllable read with a bracket

Examples: bo tu ma

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
li	ke	nga	pa	ku	mu	bwe	la	zhi	fu	*(10)*
mba	no	ya	se	nka	ja	su	twi	mo	shi	*(20)*
ju	nku	mi	vu	pi	nya	lo	za	nzo	wa	*(30)*
nye	te	nji	byo	ne	nyi	nta	me	pu	mwi	*(40)*
la	kwe	shu	ki	lu	bwi	zu	jo	na	ko	*(50)*
mu	po	zhi	pe	be	twe	mvu	vwa	nye	ngwe	*(60)*
ña	vwa	ji	ko	bwe	bi	nji	fye	ñi	te	*(70)*
nza	vwe	nta	fwe	kwa	pyo	mbo	lo	mbe	la	*(80)*
yi	sha	twa	swi	le	fya	twi	za	ki	bye	*(90)*
nke	da	gu	nte	swa	mu	pa	nse	kye	ndwa	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS)

✍ Exercise discontinued because the child had no correct answers in the first line	

Wiikitwa! Twaaya tuya pa kibese kyaaloondelaapo. Good effort! Let's go on to the next section.

Sub-test 4. NON-WORD READING | **Page 2** | 60 seconds

🗣 Ab**ino ke byaambo byaakusoomba mu Kikaonde. Naasaka utaangeepo byaavula inge waakoonsha. Kusopelela bino byaambo ine. Bitaange.** Here are some made-up words in Kikaonde. I would like you to read as many as you can. Do not spell the words, but read them.

[point to the word "opa"] **Kimweesho: kino kyaambo kyaasoombewa ke "opa".** For example, this made-up word is: "opa".

[point to the word "moti"]**Twaaya tupiteemo: Taanga kino kyaambo.** Let's practice: Please read this word.

✓🗣 **Wiikitwa, kino kyaambo ke "moti".** Good, This made-up word is "moti."

✖🗣 **Kino kyaambo kyaasoombewa ke "moti".** This made-up word is "moti."

[point to the word **"lipo"**] **Pano eseka kyaambo kikwaabo: Taanga kino kyaambo.** Now let us try another one. Please read this word.

✓🗣 **Wiikitwa, kino kyaambo kyaasoombewa ke "lipo".** Good, This made-up word is "lipo."

✖🗣 **Kino kyaambo kyaasoombewa ke "lipo".** This made-up word is **"lipo."**

[point to first word] **Inge na amba amba "Teendeka", Tatwiila pano ne kutwaajijila. Toongola kyaambo ne kyaambo ne kwiikitaanga na jiiwi jaasaansuka. Taanga lubilo na mpeyo.Inge waataana kyaambo kyo waabula kuyuuka, kishe ne kuya pa kyaaloondelaapo. Biika munwe pa kyaambo kitaanshi. Wiineengezha nyi? Tatula.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

Start the timer when the child reads the first word.

➲If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect words with a slash

(Ø) Circle self-corrections if you already marked the word incorrect

( ]) Mark the final word read with a bracket

Examples: Opa moti lipo

1	*2*	*3*	*4*	*5*	
nyali	laku	funo	suja	lebu	*(5)*
nyelapwi	byovu	nkamo	twizawa	mwinputa	*(10)*
soye	jebiki	vitafwa	kyagudi	mpowa	*(15)*
ndelune	zedigu	pyokwa	ngyeme	kwenje	*(20)*
fibabe	pundefu	zhito	ñibwe	nwelu	*(25)*
mbaaja	taku	kamu	tikopo	tipwilo	*(30)*
neebo	mubesha	pukola	nuukala	miji	*(35)*
fema	seepo	geena	bonzu	maaba	*(40)*
nyiña	tipelu	mbumu	juloongo	jiife	*(45)*
tiintu	nzankuulu	loloomu	miishiliinda	suja	*(50)*

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Wiikitwa! Twaaya tuye pa kibese kyaaloondelaapo. Good effort! Let's go on to the next section.

Sub-test 5. ORAL READING PASSAGE	60 seconds	Sub-test 6. READING COMPREHENSION
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child. Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question.
🗣 **Tala kano kaajiishimikila. Naasaka wiikataange bukiji na jiiwi jaasaansuka na bujimuku. Inge waapwiisha, nsa kukwiipuzha meepuzho pa byo waataanga. Inge na amba amba "teendeka", taanga jiishimikila buloongo.Inge waafika pa kyaambo kyo waaluba, ya pa kya loondelaapo. Biika munwe pa kyaambo kitaanshi. Wiineengezha nyi? Tatula.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	🖐If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions.	🗣**Pano nsa kukwiipuzha mepuzho pa jino jiishimikila jo waataanga kataataaka. Esekesha kukuumbula meepuzho buloongo. Waakoonsha kukuumbula meepuzho mu mulaka yeense ye ukeba.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer.
✍ (/) Mark any incorrect letters with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket	If a child says, "I don't know," mark as incorrect.	✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.

		Questions [Answers]			
Kyaje wakwa buuya watetulanga make anji <u>bulongo.</u>	7	**Ñanyi mingilo yaigilanga kyaji wakwa buuya?** (kutetula tupyopyo)	1	0	.
Muñondo wapwa, watetwile tupyompyo tuji <u>20 .</u>	13	**Kyaje wakwa buuya watetwile tupyopyo tunga ñondo** wapwa? (Makumi abiji)	1	0	.
Kibimbe waibilenga tupyopyo twa kwa <u>kyaje.</u>	19	**Kibimbe wajinga nabwubilo byatama ka?** (kwiba tupyopyo)	1	0	.
Juba jimo,kyaje watumbukile kuya na kulwa na kibimbe. Kyaje wa angchile tupyopyo twanji. Pakumona kya mwekele Buuya washimikijile kyaje <u>nzubo.</u>	40	**Pakuba amba akikizhe tupyopyo buuya waubile byepi?** (washimikile nzubo)	1	0	.

Tupyopyo twakwa kyaje,twakomene ne kubaya twabayile. Kibimbe wazhingijile <u>bingi.</u>	50	**Kibimbe wazhingijile ka?** (Mambo wakankyelwe kwiba tupyopyo)	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued: the child had no correct answers in the first line	

Wiikitwa! Twaaya tuye pa kibese kyaaloondelaapo. Good effort! Let's go on to the next section.

Sub-test 7. ENGLISH VOCABULARY	Materials: a sheet of paper, pencil, rubber	x

(/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect

A. **Body Parts:**

Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese: "**nose"** Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice: "nose"*
(Point to your nose so that you model for the student)
"**head"** Wait for the child to gesture to his/her head.
Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.

Shoulder	eye	back	knee	ear	foot	finger	chin

Part A Total Correct /8

B. Words from the Environment:

Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa. *Now I will say other words and you will show me examples of those words*.

pencil	floor	paper	rubber	desk	shoes

Part B Total Correct /6

C. Spatial Words

Tenga phensulo iyi. (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil*. *You will place the pencil where I tell you to put it. Put the pencil…*

Place a pencil and sheet of paper side by side in front of the student.

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct /6

Overall Total Correct = (Part A + Part B + Part C)	/20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH 🕮X				🕐 X
🗣**Nsa kukutaangila jiishimikila jiipi, JIMOOTU mu Kizuungu na jiiwi jaasaansuka ne kukwiipuzhaapo meepuzho. Teeleka buloongo ne kukuumbula meepuzho mwaafwaanyinwa. Waakoonsha kukuumbula meepuzho mu mulaka yeense ye ukeba. Wiineengezha nyi? Tutatule.** I am going to read you a short story aloud ONCE in Englishand then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				If a child says "I don't know," mark as incorrect.
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, they wrote a test. Jane passed very well. David did not pass. The teacher gave Jane new story books. David was not happy. David started to do his homework every evening.				
What grade are David and Jane doing? (Grade 2)	1	0	.	
What does Jane do every evening? (Jane does his homework every evening)	1	0	.	
What does David like doing? (sleeping)	1	0	.	
What did the teacher give to Jane? (new story books)	1	0	.	
What did David start doing every evening? (David started doing his homework)	1	0	.	

2018 BASELINE EGRA TOOL: LUNDA

Lunda/Zambia Grade 2 Reading Assessment: Student Response Form
Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Wudi ñahi. Izhina dami yami……..nashakamaña ku……. Inakukeña nidilumbululuku chanti. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.
[Number and ages of children; favourite sport, radio or television program, etc.]

1. Chumanyi chiwelaña neyi wudi kushikola wanyi? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Yiselanyi yiwakeña kuhema?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Leka ntahi nukulezhi chinenzhili kunu lelu. Ami nazataña kumutayi wanfulumendi watalaña hansañu zhamashikola dichi tunakufwila kwiluka chadizañawu anyana kutaña. Eyi akutonda chakubula kwiluka, neyi chekala chisela chañeela hela chakudiswekela. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Tunakulombaku wukwashi weyi mumudimu wunu. Ilaña neyi hiwunakeñuku, wunatweshi kweyi kukaana. We would like your help in this. But you do not have to take part if you do not want to.

Tunakuya nakuhema chisela chakutaña. Nukukwihula wutañi nsona,yikunku yamazu, mazu ninsañu yayihi hewulu. We are going to play a reading game. I am going to ask you to read letters, syllables, words and a short story out loud.

Kuzatisha iyi inkoloku/yozelu, nukutala mpinji yiwukuzatisha hakutaña. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Iku HIKWESEKAKU nawa hiyikukundama kunzatilu yeyi yakushikolaku. This is NOT a test and it will not affect your grade at school.

Nukukwihula nawa malwihu amakwawu akundama kuchisaka cheyi, chidi neyi muchidi wumwazatishaña kwitala niyuma yikwawu yimwekala nayu. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

HINUKUSONEKA izhina deyuku dichi kosi wukwiluka nindi izhi hiñakwilu zheyi. I will NOT write down your name so no one will know these are your answers.

Nafuntiluhu cheñi nawa, himudimu wakukanjikizhaku, neyi hiwunakeñuku, wunatweshi kweyi kukaana. Neyi tunatachiki dehi ilaña wumona neyi hadi lwihu luwukubula kukeña kwakula, ochu

hichikwikala nakukalaku. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.
Wuduhu namalwihu? Do you have any questions?
Wunadiloñeshi dehi kutachika? Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

Sub-test 1. LISTENING COMPREHENSION	🕮X		🕐 X		
🗣**Nuakukutañila nsañu yayihi hewulu kapampa kamu, kufumahu nikwihuli malwihu. Tiyililaku nakashinshi kufumahu wakuli malwihu chachiwahi. Wunatweshi kwakula malwihu mwidimi didi dezhima diwunakeñi. Wunadiloñeshi dehi? Twaya tutachiki.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.			Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says "I don't know," mark as incorrect.		
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.					
Mukakwimba wumu wayileña nakwimba kuchipañu chamwanta. Kunzhila yakuya kuchipañu kwadiñi nyitupa yayivulu. Chayileñayi munzhila wahumañeni mutupa wazuwa. Mukwakwimba watachikili kwimba gita. Dichi mutupa waholokeleli mutulu. Mukakwimba watwalekeluhu nakuya kwayileñayi. Wahumañeni mutupa wamuchiyedi. Chamanishiliyi kwimba gita mutupa wamuciyedi niyena wakamini. Chahumañeniyi mukakwimba mutupa wamuchisatu,watachikili kwimba gita yindi ilaña mutupa watwalekeluhu nakuya kwadiñiyi yena. Mukakwimba watemukili lufuchi lwalweni. Antu amulezheli nawu ona mutupa wadiñi wazhika matu.					
Mukakwimba wayileña kudihi? (Kuchipañu chamwanta)	1	0	.		
Tunyamanyi twashakamineña kunzhila yakuya kuchipañu chamwanta? (Nyitupa)	1	0	.		
Chumanyi chamwekeni kudi anyitupa ayedi atachi chembiliyi mukakwimba gita yindi? (Aholokeleli mutulu)	1	0	.		

Mutupa wamuchisatu welili ñahi chembili mukakwimba gita? (Watwalekeluhu nakuya kwadiñiyi mukakwimba)	1	0	.	
Chumanyi chabulililiyi mutupa wamuchisatu kutiya chembileñayi mukakwimba gita? (Wadiñi wazhika matu)	1	0	.	

Chinawahi! Leka tutwalekuhu nachibalu chinalondeluhu. Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION	🕮 **Page 1**	🕐 60 seconds

🗣 **Iyi hipeji yansona zhitwazatishaña mu Lunda. Nlezhuku yivumina yansona zhiwukutwesha. Bayi mazhina azhuku, ilaña yivumina yazhu.** Here is a page full of letters of the Lunda alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not their names, but their sounds.

[point to the letter A] **Twesekezhi , chivumina chaniyi nsona [inyikaku A] hi "A" neyi mwizu da /a/.** For example, the sound of this letter is /a/.

[point to the letter p] **Leka tudizi : Nlezhi chivumina chansona iyi [inyikaku p]:** Let's practice: Tell me the sound of this letter.

✓🗣 **Wunakiwani, chivumina chaniyi nsona hi /p/.** Good, the sound of this letter is /p/.

✘🗣 **Chivumina chaniyi nsona hi /p/**The sound of this letter is /p/.

[point to the letter L] **Ichi esekaku yikwawu nawa:nlezhi chivumina chaniyi nsona.** Now let us try another one. Tell me the sound of this letter.

✓🗣 **Wunakiwani, chivumina chaniyi nsona hi /l/.** Good, the sound of this letter is /l/.

✘🗣 **Chivumina chaniyi nsona hi /l/.** The sound of this letter is /l/.

[point to first letter] **Neyi nahoshi nami "Tachikaku", tachikilaku hanu nakuya kabadi kakwawu kachipapilu. Inyikaku nsona hinsona nakunlezha chivumina chindi hewulu. Wutañi swayi swayi nakashinshi kakeni. Neyi wukuwana nsona wuwunabuli kwiluka, yaku hansona yinalondeluhu.**

Start the timer when the child reads the first letter.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the

Shaku munu weyi hansona yatachi. Wunadiloñeshi dehi? Tachikaku. When I say "Begin," start
here and go across the page. Point to each letter and tell me the sound of that letter in a loud
voice. Read as quickly and carefully as you can. If you come to a letter you do not know, go on to

the next letter. Put your finger on the first letter. Ready? Begin.

✎ (/) Mark any incorrect letters with a slash

(Ø) Circle self-corrections if you already marked the letter incorrect

( ]) Mark the final letter read with a bracket

Examples: A p L

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
A	s	M	T	z	K	H	S	E	l	*(10)*
U	E	A	y	b	A	i	A	W	N	*(20)*
i	K	U	g	d	n	m	n	I	a	*(30)*
L	Z	i	k	l	i	e	a	K	v	*(40)*
k	N	M	ñ	M	a	h	I	U	D	*(50)*
h	J	K	L	K	I	m	d	h	N	*(60)*
A	P	n	D	W	a	T	L	Y	i	*(70)*
M	F	W	A	h	U	n	f	a	B	*(80)*
w	l	N	k	w	O	W	o	e	Z	*(90)*
k	A	y	p	I	m	y	H	i	A	*(100)*

✎ Time remaining on stopwatch at completion (number of SECONDS)

✎ Exercise discontinued because the child had no correct answers in the first line

first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

Chinawahi! Leka tutwalekuhu nachibalu chikwawu. Good effort! Let's go on to the next section.

Sub-test 3. SYLLABLE	**Page 2**	60 seconds

🗣 **Iyi hipeji yayikunku yamazu yitwazatishaña mu Lunda. Tañaku yikunku yamazu yiwukutwesha.** Here is a page full of syllables. Please read as many syllables as you can.

[point to the syllable ba] **Twesekezhi, ichi chikunku chezu [inyikaku ba] hi "ba" neyi mwizu da /ba/.** For example, this syllable is /ba/.

[point to the syllable we] **Twaya tudizi :Tañaku ichi chikunku chezu [inyikaku we]:** Let's practice: Read this syllable.

✓🗣 **Wunakiwani, ichi chikunku chezu hi /we/.** Good, this syllable is /we/.

✗🗣 **Ichi chikunku chezu hi /we/** This syllable is /we/.

[point to the syllable si] **Ichi tweseki chikwawu nawa: Tañaku ichi chikunku chezu.** Now let us try another one. Read this syllable.

✓🗣 **Wunakiwani, ichi chikunku chezu hi /si/.** Good, this syllable is /si/.

✗🗣 **Ichi chikunku chezu hi /si/.** This syllable is /si/.

[point to first syllable] **Neyi nahoshi nami "Tachikaku", tachikilaku hanu nakuya kabadi kakwawu kachipapilu. Inyikaku chikunku hichikunku chezu nakuchitañila hewulu. Wutañi swayi swayi nakashinshi kakeni. Neyi wukuwana chikunku chezu chiwunabuli kwiluka, yaku hachikunku chezu chinalondeluhu. Shaku munu weyi hachikunku chezu chatachi. Wunadiloñeshi dehi? Tachikaku.** When I say "Begin," start here and go across the page. Point to each syllable and say that syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot say, go on to the next one. Put your finger on the first syllable. Ready? Begin.

Start the timer when the child reads the first syllable.

➲If a child hesitates or stops on a letter for 3 SECONDS, point to the next syllable and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect syllabls with a slash
(Ø) Circle self-corrections if you already marked the syllable incorrect
( ]) Mark the final syllable read with a bracket

Examples: ba we si

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
da	fo	lwa	yi	nu	pe	mpi	ha	wu	ndi	*(10)*
mpe	ji	ma	ta	mwa	Zho	yu	fwa	ga	la	*(20)*
be	sha	da	ka	wo	fa	ja	ve	te	cha	*(30)*
go	le	pwa	fe	nya	he	lo	za	kwe	sa	*(40)*
la	kwi	bi	mpa	zhu	no	dwi	se	lwe	ju	*(50)*
le	ndi	zi	ha	mwe	fi	ya	se	mba	ni	*(60)*
ja	pu	nyu	mu	zo	cho	bu	kwe	yu	ji	*(70)*
zhi	lwi	gu	je	wa	pa	ki	nya	pi	go	*(80)*
fu	nda	shi	ga	ñu	va	sha	be	wo	ña	*(90)*
sa	de	ma	cha	la	vi	fe	zu	we	mo	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Chinawahi! Leka tutwalekuhu nachibalu chikwawu. Good effort! Let's go on to the next section.

Sub-test 4. NON-WORD READING | **Page 3** | 60 seconds

🗣 **Hanu hadi mazu anatuñewi mu Lunda. Inakukeña wutañi mazu amavulu kwesekezha nanomu wukutweshela. Bayi wuyisopelelaku, ilaña yitañi.** Here are some made-up words in Lunda. I would like you to read as many as you can. Do not spell the words, but read them.

[point to the word "opa"] **Chitalilu, idi izu datuñewa hi: "opa".** For example, this made-up word is: "opa".

[point to the word "moti"] **Leka tudizi: Tañaku idi izu:** Let's practice: Please read this word.

✓🗣 **Chachiwahi, idi izu hi "moti."** Good, This made-up word is "moti."

✗🗣 **Idi izu dakutuña hi "moti."** This made-up word is "moti."

[point to the word "yaka"] **Ichi twaya tweseki nawa dikwawu: Tañaku idi izu** Now let us try another one. Please read this word.

✓🗣 **Chachiwahi, idi izu dakutuña hi "yaka."** Good, This made-up word is "yaka."

✗🗣 **Idi izu dakutuña hi "yaka."** This made-up word is "yaka."

[point to first word] **Neyi nila nami tachikaku, tachikilaku hanu nakutwala kabadi kakwawu kachipapilu. Inyikaku hezu hezu nakutañila hewulu. Tañaku lufuchi lufuchi nakashinshi kakeni. Neyi wukuwana izu diwunabuli kwiluka, yaku hadi izu dikwawu. Shaku munu weyi hadi izu datachi. Wunadiloñeshi dehi? Tachikaku.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

Start the timer when the child reads the first word.

➲If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect
( ]) Mark the final word read with a bracket

Examples: opa moti yaka

1	*2*	*3*	*4*	*5*	
nase	maka	wule	nopu	muni	*(5)*
puku	lata	kuchu	maamu	leni	*(10)*
bano	sale	ziku	kosu	dehu	*(15)*
kitu	toti	fwenu	nane	zhilo	*(20)*
pipa	choke	lewu	kila	jaka	*(25)*
maku	kose	mwika	zeta	dedo	*(30)*
hiha	mima	tiwu	jida	yezhu	*(35)*
fafa	giga	luta	tisa	vika	*(40)*
tita	kalu	valu	woki	posa	*(45)*
kefu	sewa	bino	male	wuki	*(50)*

✍ Time remaining on stopwatch at completion (number of SECONDS) ____

✍ Exercise discontinued because the child had no correct answers in the first line	

Chinawahi! Leka tutwalekuhu nachibalu chikwawu. Good effort! Let's go on to the next section.

Sub-test 5. ORAL READING PASSAGE	🕐60 seconds	**Sub-test 6. READING COMPREHENSION**
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child.
🗣**Nsañu yayihi iyi. Inakukeña wuyitañili hewulu, chalufuchi lufuchi nakashinshi, Neyi wunamashi dehi, nikukwihula malwihu hansañu yiwunatañi. Neyi nila nami "tachikaku," tañaku nsañu chachiwahi chikupu. Neyi wuwana izu diwunabuli kwiluka twalekakuhu nezu dinalondeluhu. Shaku munu weyi hadi izu datachi. Wunadiloñeshi dehi? Tachikaku.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	✋If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions. If a child says, "I don't know," mark as incorrect.	Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question.
✍ (/) Mark any incorrect letters with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket		🗣**Ichi inakukwihula malwihu antesha hansañu yiwunatañi. Esekaku kwakula malwihu mwatelela chikupu. Wunatweshi kwakula malwihu mwidimi didi dezhima diwunakeñi.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer. ✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.

		Questions [Answers]			
Kavuyi wadiña mumañu 2.	04	**Hinyi wadiñi mumañu 2?** (Kavuyi)	1	0	.
Shikola ya Kavuyi yadiñi kwishinadi dakaloña. Hakwila ashiki kushikola, Kavuyi wadiñi nakwawuka hachawu.	17	**Shikola ya Kavuyi yadiñi kudihi?** (Kwishinadi dakaloña)	1	0	.
Kavuyi wawukileña hachawu nebwambu dindi Womba hefuku hefuku. Ifuku dimu Womba wazhiñili kushikola.	30	**Kavuyi wawukileña hachawu nanyi?** (Womba)	1	0	.
Kavuyi wadiñi wakeña kutaña nikuhema ngunja kushikola.	37	**Yumanyi yakeñeliyi Kavuyi kwila kushikola?** (Kutaña nikuhema ngunja)	1	0	.
Dichi wawukili chawu nkawindi nakuya kushikola.	43	**Muloñadi chayililiyi Kavuyi kushikola nkawindi?** (Muloña womba wazhiñili kushikola)	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued: the child had no correct answers in the first line	

Chinawahi! Leka tutwalekuhu nachibalu chikwawu. Good effort! Let's go on to the next section.

Sub-test 7. ENGLISH VOCABULARY	Materials: a sheet of paper, pencil, rubber	x

(/) Mark any incorrect words with a slash

(Ø) Circle self-corrections if you already marked the word incorrect

A. **Body Parts:**

Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese: "nose" Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice:*
"nose"
(Point to your nose so that you model for the student)
"**head"** Wait for the child to gesture to his/her head.
Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.

Shoulder eye back knee ear foot finger chin

Part A Total Correct /8

B. Words from the Environment:

Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa. *Now I will say other words and you will show me examples of those words*.

pencil	floor	paper	rubber	desk	shoes

Part B Total Correct /6

C. Spatial Words

Tenga phensulo iyi. (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil*. *You will place the pencil where I tell you to put it. Put the pencil…*

Place a pencil and sheet of paper side by side in front of the student.

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct	/6
Overall Total Correct = (Part A + Part B + Part C)	/20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH	🕮 X			🕐 X
🗣 **Inakukutañila nsañu yayihi hewulu kapampa kamu, kufumahu nikwihuli malwihu. Tiyililaku nakashinshi kufumahu wakuli malwihu chachiwahi. Wunatweshi kwakula malwihu mwidimi didi dezhima diwunakeñi. Wunadiloñeshi dehi? Twaya tutachiki.** I am going to read you a short story aloud ONCE in English and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says, "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, Jane and David wrote a test in school. Jane passed the test. David did not pass the test. The teacher gave Jane new storybooks. David was not happy. David started to do his homework every evening.				
What grade are David and Jane doing? (Grade 2)	1	0	.	
What does Jane do every evening? (Jane does homework every evening)	1	0	.	
What does David like doing? (sleeping)	1	0	.	
What did the teacher give to Jane? (new story books)	1	0	.	
What did David start doing every evening? (David started doing his homework)	1	0	.	

2018 BASELINE EGRA TOOL: LUVALE

Luvale/Zambia Grade 2 Reading Assessment: Student Response Form
Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Tambwoka, unayoyo? Lijina lyami yami ____ Ngwatwama ku _____. Nguli nakutonda ngukulwezako vyuma vimwe hali yami. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.

[Number and ages of children; favourite sport, radio or television program, etc.]

1. Vyuma muka wazanga kulinga nge kaweshi hashikolako? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Vihemo muka wazanga?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Mana ngukulweze ovyo ngunakatukila kuno lelo. Ngwazata kumuthango watala hajishikola kaha tunakuzanga kuthachikiza omu vanyike veji kulilongesanga kutanga. Unatokwa hakukusakula. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Tunakutonda kukafwa chove hamulimo ou. Nge kawasakileko kawatela kuhana kukafwa khanako. We would like your help in this. But you do not have to take part if you do not want to.

Natuhema chihemo chakutanga. Nangukuhulisa mangana utangile vasona helu, mazu namijimbu yayihi. We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.

Kuzachisa kholoko, nangumona jino lwola nauzachilamo mulimo. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Kuzata khana kacheshi nge vyeseko vyashikolako kaha nawa kavyeshi kulingisa uhone kuzata kanawa muvyeseko vyashikolako. This is NOT a test and it will not affect your grade at school.

Nangukuhulisa cheka vihula vyathanga yove, vyakufwana nge lilimi mweji kuzachisanga kuzuvo navyuma mwatwama navyo. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

Kangwechi kusoneka lijina lyoveko shikaho naumwe phimbi mwathachikiza nge jikumbulwilo khana jove. I will NOT write down your name so no one will know these are your answers.

Cheka nawa, nge kawasakileko watela kukana. Hakuputuka, nge kawakumbulwile chihulako ukalu wauchi. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. **Uli navihula?** Do you have any questions? **Unalizange lyehi tahi mangana tuputuke?** Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

Sub-test 1. LISTENING COMPREHENSION	🕮X	🕐 X
🗣 **Nangukutangila mujimbu wawihi kamwe kaha jino nangukuhulisa vihula. Ivwililа kanawa mangana ukumbulule nge omu nauhashila kumbulula vihula mulilimi unasake. Unalizange? Tuputuke jino.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.		Remove the pupil stimuli booklet from the child's view.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.		Do not allow the child to look at the passage or the questions.
Mukakwimba apwile nakuya kunganda. Kumukwakwa wakuya kunganda kwatwaminenga Vandumba. Mukakwimba awanyine Ndumba mujila. Mukakwimba embile mbanjo. Uze Ndumba asavalile. Mukakwimba awanyine Ndumba wamuchivali kaha embile mbanjo. Uze Ndumba asavalile. Omu awanyine Ndumba wamuchitatu embile mbanjo cheka. Oloze uze Ndumba aswenyene kwakamwihi namukakwimba. Mukakwimba alumukile nakuchina. Vathu vamulwekele ngwavo ou ndumba khana ajika matwitwi.		If a child says "I don't know," mark as incorrect.

Mukakwimba apwile nakuya kulihi? (Kunganda.)	1	0	.	
Tunyama muka vatwaminenga kumkwakwa wakuya kunganda? (Vandumba.)	1	0	.	
Ika yasolokele kuli vaze vandumba vavali, Omu mukakwimba embile mbanjo? (Vandumba vasavalile.)	1	0	.	
Ndumba alingile ika omu mukakwimba embile mbanjo? (Ndumba aputukile kuswenya kwakamwihi).	1	0	.	
Mwomwo ika uze ndumba wamuchitatu ahonene kusavala? (Mwomwo apwile wakujika/wakufwa matwitwi).	1	0	.	

Unazate kanawa, tutale jino vyuma vikwavo. Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION | **Page 1** | 60 seconds

Eyi ikhiko sali ili navasona vamulilimi lya Luvale alufambeti. Ngulweze vivumo vyavasona vavavulu vamuLuvale alufambeti. Kechi nge majinako oloze shina vivumo vyavo. Here is a page full of letters of the Luvale alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not their names, but their sounds.

Start the timer when the child reads the first letter.

[point to the letter A] **Chitalilo, chivumo chasona /A/.** For example, the sound of this letter is /A/.

[point to the letter m] **Tweseke: Ngulweze chivumo cha ou sona.** Let's practice: Tell me the sound of this letter.

If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on"

✓ **Mukhiko, chivumo cha ou sona chikhiko /m/.** Good, the sound of this letter is /m/.

✗ **Chivumo cha ou sona chikhiko /m/.** The sound of this letter is /m/.

[point to the letter L] **Tweseke jino: Ngulweze chivumo cha ou sona.** Now let us try another one. Tell me the sound of this letter.

✓ **Mukhiko, chivumo cha ou sona chikhiko /L/.** Good, the sound of this letter is /L/.

✗ **Chivumo cha ou sona chikhiko /L/.** The sound of this letter is /L/.

When the timer reaches 0, say "stop."

[point to first letter] **Nge ngunambe ngwami putuka, uputuke kaha nakuheta kusongo. Inyika sona hisona ungulweze chivumo chasona unenyika helu. Nge unawane sona kawathachikijileko, yako hasona mukwavo. Haka munwe wove hasona watete. Unalizange? Putuka.** When I say "Begin," start here and go across the page. Point to each letter and tell me the sound of that letter in a loud voice. Read as quickly and carefully as you can. If you come to a letter you do not know, go on to the next letter. Put your finger on the first letter. Ready? Begin.

If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and

(/) Mark any incorrect letters with a slash

(Ø) Circle self-corrections if you already marked the letter incorrect

( ]) Mark the final letter read with a bracket

Examples: A m L

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*

O	t	C	t	W	M	o	h	u	k	*(10)*	go on to the next subtask.
N	i	m	Y	V	E	B	a	f	N	*(20)*	
A	L	s	A	o	H	M	u	S	A	*(30)*	
P	i	b	I	g	J	o	a	v	j	*(40)*	
k	T	E	a	e	A	s	L	e	K	*(50)*	
u	M	c	N	I	L	D	A	U	a	*(60)*	
A	h	l	z	U	A	I	O	N	G	*(70)*	
H	e	m	a	V	n	v	U	a	i	*(80)*	
A	n	U	w	i	w	A	n	W	k	*(90)*	
I	K	a	L	K	T	m	k	u	y	*(100)*	

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Unazate kanawa, tutale jino vyuma vikwavo. Good effort! Let's go on to the next section.

Sub-test 3. SYLLABLE FLUENCY | **Page 2** | 60 seconds

🗣 **Eyi ikhiko sali ili nabavasonavumo vamulilimi lya Luvale. Tanga vivumo vyavasonavumo vyavavulu vyamu Luvale. Vanakuhane Sali yosena yalipepa ili navasonavumo,tanga vivumo vyavasonavumo wathachikiza.** Here is a page full of syllables. Read as many syllables as you.

[point to the syllable (ha)] **Chitalilo Chasonavumo /ha/.** For example, this syllable is /ha/.

[point to the syllable (fu)] **Tweseke: Tanga chivumo chasonavumo.** Let's practice: Read this syllable.

✓🗣 **Mukhiko, chivumo chasonavumo /fu/.**Good, this syllable is **/fu/.**

✗🗣 **Chivumo chaou sonavumo chikhiko /fu/.**This syllable is **/fu/.**

[point to the syllable **so**] **Tweseke jino: Tanga chivumo chaou sonavumo.** Now let us try another one. Read this syllable.

✓🗣 **Mukhiko, chivumo chaou sonavumo chikhiko /so/.** Good, this syllable is **/so/**

✗🗣 **Chivumo chaou sonavumo chikhiko /so/.**This syllable is **/so/.**

[point to first syllable] **Nge ngunambe ngwami putuka, uputuke kaha nakuheta kusongo.Inyika sonavumo hisonavumo ungulweze chivumo chasonavumo utangile helu. Nge unawane sonavumo kawathachikijileko, yako hasonavumo mukwavo. Haka munwe wove hasonavumo watete. Unalizange? Putuka kutanga.** When I say "Begin," start here and go across the page. Point to each syllable and read this syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot read, go on to the next one. Put your finger on the first syllable. Ready? Begin.

Start the timer when the child reads the first syllable.

➲If a child hesitates or stops on a syllable for 3 SECONDS, point to the next syllable and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect syllables with a slash

(Ø) Circle self-corrections if you already marked the syllable incorrect

( ]) Mark the final syllable read with a bracket

Examples: ha fu so

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
ma	te	no	la	ku	hi	pu	ve	ji	se	*(10)*
vi	fo	hu	ta	nya	ja	vo	ngi	mu	ka	*(20)*
tu	ngo	shi	me	wa	zu	cho	mba	ya	ho	*(30)*
mi	nde	ye	pa	chi	ko	ki	lo	ne	wi	*(40)*
po	nu	ngu	mo	lyu	va	mbwa	chu	ke	nu	*(50)*
pe	li	yi	sa	kha	nga	to	sha	za	nge	*(60)*
lwa	vya	wo	yo	lu	shi	cha	ndwa	pu	fi	*(70)*
shu	nye	le	vye	je	ku	njo	ti	vwa	he	*(80)*
ngwa	lwo	mbi	jo	na	fa	su	vyu	che	mbwi	*(90)*
phwe	vu	yu	mbu	tha	pya	lwe	nwa	khwa	we	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Unazate kanawa, tutale jino vyuma vikwavo. Good effort! Let's go on to the next section.

Sub-test 4. NON-WORD READING | **Page 3** | 60 seconds

🗣 **Awa himazu amwe akutaka mu Luvale. Ngunasake yove utange mazu amavulu aze nauhasa. Kanda kuwasopelako oloze atange.** Here are some made-up words in Luvale. I would like you to read as many as you can. Do not spell the words, but read them.

[point to the word "oli"] **Chitalilo, eli lizu lyakutaka likhiko "oli".** For example, this made-up word is: "oli".

[point to the word "kyenyi"] **Tweseke: Tanga eli lizu.** Let's practice: Please read this word.

✓🗣 **Unazate kanawa. Eli lizu likhiko "kyenyi".** Good, This made-up word is "kyenyi."

✗🗣 **Lizu lyakutaka likhiko "kyenyi".** This made-up word is "kyenyi."

[point to the word "feya"] **Eseka lizu likwavo: Tanga eli lizu.** Now let us try another one. Please read this word.

✓🗣 **Unazate kanawa, lizu lyakutaka likhiko "feya".** Good, This made-up word is "feya."

✗🗣 **Lizu lyakutaka likhiko "feya".** This made-up word is "feya."

[point to first word] **Nge ngunambe ngwami putuka, uputuke kutanga nakuheta kusongo. Inyika halizu halizu kaha tangila helu. Tanga washiwashi mujila yambwende. Nge nauwana lizu kawathachikijileko, yako halizu likwavo. Haka munwe wove halizu lyatete. Unalizange? Putuka.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

Start the timer when the child reads the first word.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋ When the timer reaches 0, say "stop."

✋ If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect words with a slash

(Ø) Circle self-corrections if you already marked the word incorrect

( ]) Mark the final word read with a bracket

Examples: oli kyenyi feya

1	*2*	*3*	*4*	*5*	
atali	famatu	mbateta	tali	ndemaku	*(5)*
solya	kojo	nyamiu	kawasa	malazu	*(10)*
zapula	mandapa	lazuma	nwaka	vajingwa	*(15)*
namwe	mbatuma	mifatu	zelowe	mwochaka	*(20)*

chasi	nakali	njichika	nazuka	kanwahu	*(25)*	
nila	juthu	teja	aphuka	eu	*(30)*	
afa	lamyaka	sicha	kulivo	yuswa	*(35)*	
ndocho	nyongono	tyehi	lanawa	takamu	*(40)*	
makwale	phikuma	nuthutu	zapalu	tenyi	*(45)*	
pushikola	femana	sujimba	mayitanu	ukhiye	*(50)*	

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Unazate kanawa, tutale jino vyuma vikwavo. Good effort! Let's go on to the next section.

Sub-test 5. ORAL READING PASSAGE	60 seconds	Sub-test 6. READING COMPREHENSION
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child. Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question.
🗣 **Vanakuhane mujimbu wawihi. Utangile helu, muwashiwashi, oloze mujila yakwoloka. Nge unakumisa kutanga, nangukuhulisa vihula hali ovyo unatange. Nge ngwami "putuka", tanga mujimbu mujila yambwende nauhashilamo. Nge nauwana lizu lize kawathachikijileko, yako halizu likwavo. Haka munwe wove halizu lyatete. Unalizange? Putuka.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	✋If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions. If a child says, "I don't know," mark as incorrect.	🗣 **Nangukuhulisa jino vihula vyavindende hamujimbu unatange. Eseka kukumbulula vihula vize nauhasa. Unahase kukumbulula vihula mulilimi unasake.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer.
✍ (/) Mark any incorrect letters with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket		✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.

		Questions [Answers]			
Mutete apwile mumango 2 hashikola yenyi.	6	**Hiya apwile mumango 2?** (Mutete).	1	0	.
Shikola ya Mutete yapwile musali yakalwiji. Hakalwiji hapwile chau chakutunga namitondo yaumu.	18	**Shikola ya Mutete yapwile kulihi?** (Musali yakalwiji).	1	0	.
Makumbi osena ahichilenga hachau na Chitengi. Mutete evwilenga woma hakuhita hachau ukhawenyi.	30	**Mutete ahichilenga hachau neya?** (Na Chitengi).	1	0	.
Likumbi limwe Chitengi kayile kushikolako. Mutete azangile kutanga nakwasa ngunja chikuma hashikola.	42	**Vyuma muka azangilenga kulinga Mutete hashikola?** (Kutanga nakwasa ngunja).	1	0	.
Shikaho Mutete ahichile hachau ukhawenyi nakuya kushikola.	49	**Mwomwo ika Mutete ayile kushikola ukawenyi likumbi lwimwe?** (Mwomwo Chitengi kayile kushikolako).	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued: the child had no correct answers in the first line	

Unazate kanawa, tutale jino vyuma vikwavo. Good effort! Let's go on to the next section.

Sub-test 7. ENGLISH VOCABULARY

Materials: a sheet of paper, pencil, rubber

x

✍ (/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect

A. **Body Parts:**

🗣 **Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese:** "**nose"** Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice: "nose"*
(Point to your nose so that you model for the student)
"**head"** Wait for the child to gesture to his/her head.
Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.

Shoulder eye back knee ear foot finger chin

Part A Total Correct /8

B. Words from the Environment:

🗣 **Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa.** *Now I will say other words and you will show me examples of those words*.

pencil	floor	paper	rubber	desk	shoes

Part B Total Correct /6

C. Spatial Words

🗣 **Tenga phensulo iyi.** (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil. You will place the pencil where I tell you to put it. Put the pencil…*

Place a pencil and sheet of paper side by side in front of the student.

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct /6

Overall Total Correct = (Part A + Part B + Part C) /20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH	🕮 X			🕐 X
🗣 **Nangukutangila mujimbu wawihi kamwe kaha jino nangukuhulisa vihula. Ivwilila kanawa mangana ukumbulule omu nauhashila ukumbulule vihula mulilimi unasake. Unalizange? Tuputuke jino.** I am going to read you a short story aloud ONCE in English and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				Do not allow the child to look at the passage or the questions.
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, Jane and David wrote a test in school. Jane passed the test. David did not pass the test. The teacher gave Jane new storybooks. David was not happy. David started to do his homework every evening.				If a child says "I don't know," mark as incorrect.
What grade are David and Jane doing? (Grade 2)	1	0	.	
What does Jane do every evening? (Jane does homework every evening)	1	0	.	
What does David like doing? (sleeping)	1	0	.	
What did the teacher give to Jane? (new story books)	1	0	.	
What did David start doing every evening? (David started doing his homework)	1	0	.	

2018 BASELINE EGRA TOOL: SILOZI

Silozi/Zambia Grade 2 Reading Assessment: Student Response Form Administrator Instructions and Protocol – 2018

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Uzuhile. Libizo laka kina _____ mi nipila kwa_____. Nibata kukutaluseza hanyinyani zaka. Good morning. My name is ____ and I live in _____. I'd like to tell you a little bit about myself.
[Number and ages of children; favourite sport, radio or television program, etc.]

1. Ki likamañi zeutabela kueza hausiyo kwa sikolo? What do you like to do when you are not in school?

[Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent].

2. **Ki lipapali mañi zeutabela kubapala?** What games do you like to play?

Verbal Consent: Read the text in the box clearly to the child.

Nikatabela kukutaluseza zenitezi kwanu kacenu. Ni sebeza mwa Liluko la Tuto mwa Zambia mi lulika kuutwisisa momuitutela kubala ni lipalo. Muketilwe ka kunomiwa feela. Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.

Lutokwa tuso yahao mwa nto ye. Kono haiba hautabeli wa kona kubulela. We would like your help in this. But you do not have to take part if you do not want to.

Lukabapala papali yakubala hamoho cwalo ni ya lipalo. Nikakukupa kubala litaku, manzwi ni likande lelikuswani ka kutiisa. We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.

Ka kuitusisa waci/sisebeliso/siitusiso, nikabona kuli uunga nako yekuma kai kufeza misebezi yeo ufiwa. Using this stopwatch/device/gadget, I will see how long it takes you to read.

Ye hakitatubo, mi haina kubalelwa kwa linepo zahao za kwa sikolo. This is NOT a test and it will not affect your grade at school.

Nikakubuza lipuzo zeñwi kuamana ni lubasi lwahenu, zeswana sina mushobo omuitusisa kwandu ni lika zeñwi cwalo ze luilwe ki lubasi lwahenu. I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.

Hanina kuñola libizo lahao kona kuli hakuna yakaziba kuli ze ki likalabo zahao. I will NOT write down your name so no one will know these are your answers.

Hape, wakona kuhana kubapala haiba hautabeli. Halukakala haiba kuna ni puzo yeusalati kualaba kulukile kusaalaba. Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. **Kana kikuli unani lipuzo?** Do you have any questions? **Kana kikuli uitukiselize kukalisa?** Are you ready to get started?

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

A. Date of assessment: (Example: 5 November 2018 = 11/05/2018)	Date: _____ Month: _____ Year: _____	F: School EMIS code:	
B. Province:		G. Class:	☐ Grade 2
C. District:		H. Pupil birth date:	Mo_____ Yr_____
D. Assessor name:		I. Gender	☐ Boy ☐ Girl
E: School name:		**Start Time**	_____ : _____ ☐ AM [Tick one] ☐ PM

LISTENING COMPREHENSION **LC-2** 🕮X				🕐 X
🗣 **Ni kakubalela likande lelikuswani HAÑWI ka kutiisa ni kukubuza lipuzo zeñwi. Teeleza katokomelo ni kualaba lipuzo ka moukonela. Wakona kualaba lipuzo mwa mushobo oulata. Uitukisize? Halukalise.** I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view. Do not allow the child to look at the passage or the questions. If a child says, "I don't know," mark as incorrect.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				
Nalumino ni Mate nebakena fa sikolo senesiyahilwe fa munanga. Zazi leliñwi nebafitile kwa sikolo kapili mi sebaya kwakutapa mwa nuka. Habanzebatapa cwalo, nebakashelizwe mwabuse ki mandinda. Mandui nebatusize Nalumino ni Mate kubasiliseza kwa likamba la sikolo. Bayofumana babañwi mwa kilasi. Bo muluti nebababahalifezi ka kuloba milao ya sikolo.				
Sikolo fonebakena Nalumino ni Mate nesiyahilwe kai? (Kwatuko ni nuka).	1	0	.	
Nalumino ni Mate nebaezize ñi hanebafitile kapili kwa sikolo? (Nebaizo tapa mwa nuka).	1	0	.	
Ki ñi senesikashelize Nalumino ni Mate kwabuse bwa nuka?	1	0	.	

(Mandinda).				
Banebakutisize Nalumino ni Mate kwa sikolo neli bo mañi? (Mandui).	1	0	.	
Uhupula kuli Nalumino ni Mate nebafosize sikamañi senesitisize kuli bo muluti babahalifele? (Kuloba milao yasikolo/kakuliyeha/kuyotapa).	1	0	.	

Ki hande! Haluyeñi kwa kalulo yetatama. Good effort! Let's go on to the next section.

Sub-test 2. LETTER SOUND IDENTIFICATION 🕮 **Page 1** 🕐 60 seconds

Ki le likepe lelitezi litaku za Silozi. Unibulelele milumo ya litaku ze ka moukonela kaufela. when the child
Isiñi mabizo azona, kono milumo yazona. Here is a page full of letters of the Silozi reads the first
alphabet. Please tell me the SOUNDS of as many letters of the alphabet as you can. Not letter.
their names, but their sounds.

➲ If a child hesitates or stops on a letter for 3 SECONDS, point to the next letter and say "Go on"

[point to the letter A] **Ka mutala, mulumo wa taku yeki /A/.**For example, the sound of this letter is /A/.

[point to the letter p]**Halulike: Ni bulelele mulumo wa taku ye:**Let's practice: Tell me the sound of this letter.

✓🗣 **Ki hande, mulumo wa taku ye ki /p/.** Good, the sound of this letter is /p/.

✗🗣 **Mulumo wa taku ye ki/p/.** The sound of this letter is /p/.

[point to the letter L] **Cwale lika yeñwi: Nibulelele mulumo wa taku ye.** Now let us try another one. Tell me the sound of this letter.

✋ When the timer reaches 0, say "stop."

✓🗣 Ki hande, mulumo wa taku ye ki/L/. Good, the sound of this letter is /L/.

*🗣 **Mulumo wa taku ye ki/L/.** The sound of this letter is /L/.

✋ If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue

[point to first letter] **Hanikabulela kuli "kala", ukalele fa, ni kufeza likepe kaufela.Usupe taku ni kunibulelela mulumo wa taku yeo ka kutiisa.Haiba ufita fa taku yeusazibi mulumo, uye kuyetatama.Beya munwana wahao fa taku yapili.Uitukisize? Kala.** When I say "Begin," start here and go across the page. Point to each letter and tell me the sound of that letter in a loud

voice. Read as quickly and carefully as you can. If you come to a letter you do notthis subtask, know, go on to check the box at the next letter. Put your finger on the first letter. Ready? Begin.

(/) Mark any incorrect letters with a slash

(Ø) Circle self-corrections if you already marked the letter incorrect

( ]) Mark the final letter read with a bracket the bottom, and go on to the next subtask.

Examples: A p L

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
a	W	T	u	N	B	e	a	K	u	*(10)*
n	u	B	t	s	A	t	n	b	A	*(20)*
E	A	l	a	O	I	E	A	m	N	*(30)*
u	i	Z	h	K	Z	Y	u	I	A	*(40)*
e	a	l	b	I	E	S	e	w	M	*(50)*
l	i	E	o	t	O	T	I	a	l	*(60)*
f	ñ	a	L	a	n	a	L	n	U	*(70)*
u	e	i	N	k	U	m	u	k	H	*(80)*
A	m	a	U	b	i	B	A	p	L	*(90)*
o	C	z	k	a	w	l	o	I	A	*(100)*

Time remaining on stopwatch at completion (number of SECONDS)

Exercise discontinued because the child had no correct answers in the first line

Ki hande! Haluye kwa kalulo yetatama. Good effort! Let's go on to the next section.

Sub-test 3. SYLLABLE FLUENCY | **Page 2** | 60 seconds

🗣 **Ki le likepe lelitezi manzwinyana a Silozi. Unibalele manzwinyana a ka moukonela kaufela.** Here is a page full of syllables. Please read as many syllables as you can.

[point to the syllable /**fa/**] **Ka mutala, linzwinyana le ki /fa/.** For example, the syllable is /**fa/**.

[point to the syllable /**mu/**] **Halulike: Ni bulelele linzwinyana le /mu/:** Let's practice: Read this syllable.

✓🗣 **Ki hande, linzwinyana le ki /mu/.** Good, this syllable is /**mu/**.

✗🗣 **Linzwinyana le ki mu.** This syllable is /**mu/**.

[point to the syllable /**lwa/**] **Cwale lika leliñwi: Nibalele linzwinyana le [lwa].** Now let us try another one. Read this syllable.

✓🗣 **Ki hande, linzwinyana le ki /lwa/.** Good, this syllable is /**lwa/**.

✗🗣 **Linzwinyana le ki /lwa/.** This syllable is /**lwa/**.

[point to first syllable] **Hanikabulela kuli "kala", ukalele fa, ni kufeza likepe kaufela.Usupe linzwinyana ni kunibalela linzwinyana leo ka kutiisa. Haiba ufita fa linzwinyana leusazibi, uye kulelitatama.Beya munwana wahao fa linzwinyana lapili.Uitukisize? Kala.** When I say "Begin," start here and go across the page. Point to each syllable and read that syllable in a loud voice. Read as quickly and carefully as you can. If you come to a syllable you cannot read, go on to the next one. Put your finger on the first syllable. Ready? Begin.

Start the timer when the child reads the first syllable.

➲If a child hesitates or stops on a syllable for 3 SECONDS, point to the next syllable and say "Go on"

When the timer reaches 0, say "stop."

If the child does not provide a single correct response on the first line (10 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

✍ (/) Mark any incorrect letters with a slash
(Ø) Circle self-corrections if you already marked the letter incorrect
( ]) Mark the final letter read with a bracket

Examples: fa mu lwa

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	
ndi	ya	le	la	si	mwe	mbu	wa	ye	Ka	*(10)*
mu	ke	ba	yi	ma	mpi	tu	na	to	mbo	*(20)*
yu	ta	so	be	ha	ti	pa	lu	kwa	ni	*(30)*
sa	li	ta	mo	ko	lo	bi	ci	si	ndu	*(40)*
swa	ngo	bu	se	fa	ki	he	cwa	zu	nga	*(50)*
ko	yo	ke	li	po	ne	ma	shi	nyu	mwe	*(60)*
ti	za	nda	hu	fi	le	fu	na	mba	nu	*(70)*
pyo	ña	swi	nkwi	ca	swa	ño	nwe	pu	sho	*(80)*

	ci	bwe	be	hi	ñwe	tu	kwa	wi	ta	bo	*(90)*
	swe	cwa	kwe	la	cu	fe	ngwa	pu	we	ze	*(100)*

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Ki hande! Haluyeñi kwa kalulo yetatama. Good effort! Let's go on to the next section.

Sub-test 4. NON-WORD READING | **Page 3** | 60 seconds

🗣 **Ki ao manzwi abupilwe mwa puwo ya Silozi.Nikatabela kuli uabale ka moukonela.Usike wapeletela manzwi ao, kono uabale.** Here are some made-up words in Silozi. I would like you to read as many as you can. Do not spell the words, but read them.

[point to the word "poa"] **Ka mutala, linzwi le lelibupilwe ki: "poa".** For example, this made-up word is: "poa".

[point to the word "mito"] **Halulikeñi: Bala linzwi le.** Let's practice: Please read this word.

✓🗣 **"Ki hande, linzwi le ki "mito".**Good, This made-up word is "mito."

✗🗣 **Linzwi le lakubupa ki "mito".**This made-up word is "mito."

[point to the word "kayo"] **Cwale lika leliñwi: bala linzwi le.** Now let us try another one. Please read this word.

✓🗣 **"Kihande, linzwi lakubupaki "kayo".** Good, This made-up word is "kayo."

✗🗣 **Linzwi lukubupa ki "kayo".** This made-up word is "kayo."

[point to first word] **Hanikabulela kuli "Kala", kalela fa ni kufeza likepe kaufela. Supa linzwi ni linzwi nikulibala kakutiisa.Ubale kakunyangufisa ni katokomelo yetuna.Haiba ufumana linzwi leusazibi uye kulelitatama.Beya munwana wahao fa linzwi lapili.Uitukisize? Kala.** When I say "Begin," start here [point to first word] and read across the page [point]. Point to each word and read it in a loud voice. Read as quickly and carefully as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.

✍ (/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect
( ]) Mark the final word read with a bracket

Examples: poa mito kayo

1	*2*	*3*	*4*	*5*	
masufo	fulilo	humeya	bulona	milebi	*(5)*

Start the timer when the child reads the first word.

➲If a child hesitates or stops on a letter for 3 SECONDS, point to the next word and say "Go on"

✋When the timer reaches 0, say "stop."

✋If the child does not provide a single correct response on the first line (5 items), say "Thank you!", discontinue this subtask, check the box at the bottom, and go on to the next subtask.

kila	tehi	nusikila	lanawa	kulibo	*(10)*	
eloze	zapalu	sumbimu	ukwese	anji	*(15)*	
yami	kulenwa	fakulya	paambe	nkati	*(20)*	
ndongu	wazu	laanza	bwato	tanteza	*(25)*	
bukilo	tafale	sampi	ndi	hando	*(30)*	
sanzwi	banu	ywa	balwini	mibizi	*(35)*	
likupu	maya	mikefe	mapulelo	mumuti	*(40)*	
ndite	mbilo	yibo	ñula	hikolo	*(45)*	
buhote	miliba	taluluza	wani	zala	*(50)*	

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued because the child had no correct answers in the first line	

Ki hande! Haluyeñi kwa kalulo yetatama. Good effort! Let's go on to the next section.

Sub-test 5. ORAL READING PASSAGE	60 seconds	Sub-test 6. READING COMPREHENSION
Show the child the sheet in the student stimulus booklet as you read the instructions.	➲ If a child hesitates or stops on a letter for 3 SECONDS, say "Go on"	After the child is finished reading, REMOVE the passage from in front of the child. Ask the child only the questions related to the text read. A child must read all the text that corresponds with a given question. If the child does not provide a response to a question after 10 seconds, mark "no response" and continue to the next question. Do not repeat the question.
🗣**Kile likande lelikuswani. Nibata kuli ulibale kakutiisa, ili kakunyangufisa ni katokomelo.Haufeza, nikakubuza lipuzo kuamana nizeubalile. Hanikabulela kuli "Kala", bala likande kamoukonela. Haiba ufita fa linzwi leusazibi, uye kulelitatama. Beya munwana wahao fa linzwi lapili. Uitukisize? Kala.** Here is a short story. I want you to read it aloud, quickly but carefully. When you finish, I will ask you some questions about what you have read. When I say "Begin," read the story as best as you can. If you come to a word you do not know, go on to the next word. Put your finger on the first word. Ready? Begin.	✋If the child does not provide a single correct word on the first line of text. Do not ask any comprehension questions. If a child says, "I don't know," mark as incorrect.	🗣**Cwale nikakubuza lipuzo zenyinyani kuamana ni likande leusazobala. Lika kualaba lipuzo ka moukonela. Wakona kualaba lipuzo mwa mushobo oulata.** Now I am going to ask you a few questions about the story you just read. Try to answer the questions as well as you can. You can provide your answers in whichever language you prefer.
✍ (/) Mark any incorrect letters with a slash (Ø) Circle self-corrections if you already marked the letter incorrect ( ]) Mark the final letter read with a bracket		✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.

		Questions [Answers]			
Watae naakena mwa giledi 2.	5	**Watae nakena mwa sitopa mañi?** (giledi 2)	1	0	.
Sikolo fanakena Watae nesiyahilwe mwabuse bwa nuka.	12	**Sikolo fanakena Watae nesiyahezwi kai?** (mwabuse bwa nuka).	1	0	.
Kuli afite fa sikolo seo, Watae naana ni kusila fa mutano. Kakuli Watae naasabanga kusila anosi fa mutano woo, naasilanga ni mulikanaahae Namakau.	35	**Ki mañi yanasilanga fa mutano ni Watae?** (Namakau).	1	0	.
Zazi leliñwi Namakau naasikaya kwa sikolo. Watae nalata hahulu kuituta ni kubapala lipapali zeshutana kwa sikolo.	51	**Ki ñi zanatabela hahulu Watae kwa sikolo?** (Kuituta ni kubapala lipapali zeshutana).	1	0	.

Kona kuli naasilile fa mutano <u>alinosi.</u>	57	**Uhupula kuli Watae naikutwile cwañi hanakonile kusila fa mutano alinosi?** (Neba ikutwile hande/naatabile).	1	0	.

✍ Time remaining on stopwatch at completion (number of SECONDS)	
✍ Exercise discontinued: the child had no correct answers in the first line	

Ki hande! Haluyeñi kwa kalulo yetatama. Good effort! Let's go on to the next section.

Sub-test 7. ENGLISH VOCABULARY	Materials: a sheet of paper, pencil, rubber	x

(/) Mark any incorrect words with a slash
(Ø) Circle self-corrections if you already marked the word incorrect

A. **Body Parts:**

Tsopano ndidzachula mau m'Cinyanja amene aimilira ziwalo za thupi. Ndionetse mbali ya thupi ndidzachula. Tiye tiyese: "**nose"** Say, *I'll say words in English that represent parts of the body. Show me what part of your body the word means. Let's practice: "nose"*
(Point to your nose so that you model for the student)
"**head"** Wait for the child to gesture to his/her head.
Thereafter say, **Wacita bwino wamvetsa malangizo! Tiye tiyambe.** *Good you understand the directions! Let's start*.

Shoulder	eye	back	knee	ear	foot	finger	chin

Part A Total Correct /8

B. Words from the Environment:

Tsopano ndidzachula mau ena ndipo udzandionetsa zitsanzo za mauwa. *Now I will say other words and you will show me examples of those words*.

pencil	floor	paper	rubber	desk	shoes

Part B Total Correct /6

C. Spatial Words

Tenga phensulo iyi. (Hand the pencil to the child.) **Udzaika phensulo pamene ndidzakuuza kuti uyike. Ika phensulo ….** Say, *Take this pencil*. *You will place the pencil where I tell you to put it. Put the pencil…*

Place a pencil and sheet of paper side by side in front of the student.

In front of you	next to the paper	under the paper	behind you	On the paper	to the right of the paper

Part C Total Correct /6

Overall Total Correct = (Part A + Part B + Part C) /20

Sub-test 8. LISTENING COMPREHENSION – ENGLISH	🕮X			🕐 X
🗣**Nikakubalela likande lelikuswani HAÑWI mwa Sikuwa ka kutiisa ni kukubuza lipuzo zeñwi. Teeleza ka tokomelo ni kualaba lipuzo ka moukonela.Wakona kualaba lipuzo mwa mushobo oulata. Uitukisize? Halukalise.**I am going to read you a short story aloud ONCE in English and then ask you some questions. Please listen carefully and answer the questions as best as you can. You can answer the questions in whichever language you prefer. Ready? Let's begin.				Remove the pupil stimuli booklet from the child's view.
✍ (✓) 1 = Correct (✓) 0 = Incorrect (✓) . = No response.				Do not allow the child to look at the passage or the questions.
Jane and David are in Grade 2. Every evening, Jane does her homework. David does not do his homework. He likes sleeping. One day, Jane and David wrote a test in school. Jane passed the test. David did not pass the test. The teacher gave Jane new storybooks. David was not happy. David started to do his homework every evening.				If a child says, "I don't know," mark as incorrect.
What grade are David and Jane doing? (Grade 2)	1	0	.	
What does Jane do every evening? (Jane does homework every evening)	1	0	.	
What does David like doing? (sleeping)	1	0	.	
What did the teacher give to Jane? (new story books)	1	0	.	
What did David start doing every evening? (David started doing his homework)	1	0	.	

LEARNER QUESTIONNAIRE

INTERVIEW QUESTIONS		
Instructions: **Please note that all instructions related to the interviewer are in bold and capital letters.** **Do not read the answers options unless you are clearly advised to do so. The icon 📖 indicates that there is a stimulus sheet for this question**		
1.	Are you a boy or a girl?	Boy ..... Girl .....
2.	How old are you?	Years:..... Do not know/No response: .....
3.	Is your classroom teacher at school today?	No:..... Yes:..... Do not know/No response:.....
4.	In what class were you last year? **[Don't verify if the pupil is repeating]**	Grade 1:..... Grade 2:..... Do not know/No response:.....
5.	Did you eat before coming to school today?	No:..... Yes:..... Do not know/No response:.....

6.	Do you have a school feeding programme in your school?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐			
7.	Were you absent from school on any days last week?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐			
8.	I would like to see what school books you have with you today. Please show me your [……]. **[Ask the child to show you each item and indicate if they could do so]**		No	Yes	Do not know/No response
		[*Home language**]reader	☐	☐	☐
		[*Home language**] exercise book	☐	☐	☐
		English reader	☐	☐	☐
		English exercise book	☐	☐	☐
		Mathematics textbook	☐	☐	☐
		Mathematics exercise book	☐	☐	☐
9.	**[Record how many pages the teacher has marked or corrected mistakes on in the child's reading exercise book]**	No pages:..... ☐ One quarter of the pages: ..... ☐ Half of the pages: ..... ☐ Three quarters of the pages:..... ☐ All pages: ..... ☐ Reading exercise book not available:..... ☐			

10.	What does the teacher do when you do well on a test or during a lesson? **Do NOT read the responses to the pupil. Tick ALL responses.**	Nothing:..... ☐ Praises me: ..... ☐ Gives me a prize: ..... ☐ Other: ..... ☐ Other (specify)..... ☐ Do not know/No response: ..... ☐
11.	What does the teacher normally do when you are unable to answer a question or you answer a question incorrectly? **Do NOT read the responses to the pupil. Tick ALL responses.**	Teacher rephrases/explains the question:..... ☐ Teacher encourages the student to try again:..... ☐ Teacher asks another student:..... ☐ Teacher asks again: ..... ☐ Teacher corrects the student:..... ☐ Teacher hits student: ..... ☐ Other: ..... ☐ Other (specify)..... ☐ Don't know/Refuse: ..... ☐
12.	Did you read books on your own during school yesterday (or on the most recent school day)?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
13.	Did you bring home reading books from your classroom or from the school library last week?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
14.	Does your teacher remind you to use your finger to point to words when you read?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐

15.	When you learn new words, does your teacher bring in objects or draw pictures on the chalkboard that represent the words?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
16.	When you learn a letter does your teacher tell you the letter name and letter sounds?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
17.	When you learn a letter, does your teacher ask you to write it in the air, or on your desk, with your fingers?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
18.	When you learn a letter, does your teacher ask what pupils in the class have that letter in their first names?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
19.	When you write, does your teacher tell you to put a finger space between each word?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐

20.	When you read a word incorrectly, does your teacher tell you to look at all of the letters?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐
Now I'm going to ask you a few questions about your home.		

21.	What language do you speak *most* frequently at home? **[Do NOT read the responses to the child. Tick only ONE response.]**	Chibemba ..... ☐ Cinyanja ..... ☐ Chitonga ..... ☐ Kikaonde..... ☐ Luvale ..... ☐ Silozi..... ☐ Silunda ..... ☐ English ..... ☐ Other (specify)..... ☐ Do not know/No response: ..... ☐
22.	What other languages do you speak at home? **[Do NOT read the responses to the child. Tick ALL responses.]**	Chibemba ..... ☐ Cinyanja ..... ☐ Chitonga ..... ☐ Kikaonde..... ☐ Luvale ..... ☐ Silozi..... ☐ Silunda ..... ☐ English ..... ☐ Other (specify)..... ☐ Do not know/No response: ..... ☐

23.	🕮Q1 Where do you normally get your drinking water from at home? **[Read the responses to the child. Tick only ONE response.]**	River, lake or stream:..... ☐ Well or borehole: ..... ☐ Communal tap: ..... ☐ Water truck/ tank: .... ☐ Waterpipe / tap in the home: ..... ☐ Other (specify)..... ☐ Do not know/No response: ..... ☐
24.	Does your home have electricity?	No: ..... Yes: ..... Do not know/No response: .....

25.	🕮Q2 Where is food normally cooked at your home? **[Read the responses to the child. Tick only ONE response.]**	Outside the house: ..... In a shed: ..... Inside the house: ..... ☐ Do not know/No response: .....
26.	🕮Q3 How is food most often cooked at your home? **[Read the responses to the child. Tick only ONE response.]**	Using firewood: ..... ☐ Using a charcoal burner: ..... ☐ Using a kerosene stove: ..... ☐ Using a gas stove: ..... Using an electric stove/cooker: ..... ☐ Other (specify)..... ☐ Do not know/No response: ..... ☐

27.	🕮Q4 When you are at home, what type of toilet do you use? **[Read the responses to the child. Tick only ONE response.]**	No toilet ..... ☐ A pit toilet ..... ☐ A shared toilet: ..... ☐ A communal toilet: ..... ☐ A flush toilet outside your house: ..... ☐ A flush toilet in your house: ..... ☐ Other (specify)..... ☐ Do not know/No response: ..... ☐		
28.	🕮Q5 Does your family have the following items in your home?	No	Yes	Do not know/No response
A	Radio			
B	Mobile phone			
C	Television (TV)			
D	Computer			
E	Refrigerator			
F	Bicycle			
G	Motorbike			
H	Car/truck			
I	Cattle/livestock			
29.	Apart from your school books, are there books, newspapers or other materials for you to read at your home?	No: ..... ☐ Yes: ..... ☐ Do not know/No response: ..... ☐		

30.	How often do you read out loud to someone at home? Never, sometimes, or every day? **[Read the responses to the child. Tick only ONE response.]**	Never: ☐ Sometimes: ☐ Everyday: ☐ Do not know/No response: ☐
31.	How often does someone read to you at home?Never, sometimes, or every day? **[Read the responses to the child. Tick only ONE response.]**	Never: Sometimes: Everyday: Do not know/No response:
32.	Did you have any homework last week?	No: ☐ Yes: ☐ Do not know/No response: ☐

33.	Does someone at home help you with your homework when you need it?	No: ☐ Yes: ☐ Do not know/No response: ☐
34.	Does your mother/guardian know how to read?	No: ☐ Yes: ☐ Do not know/No response: ☐
35.	Does your father/guardian know how to read?	No: ☐ Yes: ☐ Do not know/No response: ☐
36.	Did you go to nursery/pre-school/KG before starting Grade 1? **[If no or don't know, skip question 39]**	No: ☐ Yes: ☐ Do not know/No response: ☐
37.	Did you attend nursery/pre-school/KG at this school or at another?	This school for whole year: ☐ This school for part of whole year: ☐ Another school: ☐
Thank you very much for your help. You may now return to class.		
	Time the test ended	H H M M AM/PM

TEACHER QUESTIONNAIRE

General Instructions

- Ask the teacher to answer each question orally, as in an interview.
- DO NOT READ THE ANSWER OPTIONS TO THE TEACHER UNLESS THE INSTRUCTIONS INDICATE TO DO SO.
- Wait for the teacher to respond to each question, then select the answer that corresponds to his or her response.
- For most questions, only one response is permitted. The instructions indicate the exceptions.
- Note that all instructions to interviewer are in **bold letters.**

School Name	.....
School EMIS Number	.....
Grade	.....
Assessor Name	.....

Teacher Consent Form (Read aloud to the teacher)
Hello, my name is _____. My colleagues and I are working with the Examinations Council of Zambia to conduct assessments of the reading ability of pupils in grade 2 in a sample of schools. This includes a reading assessment and a mathematics assessment.

- The purpose of the reading portion of the study is to assess the reading ability of pupils. As part of our research, we are also gathering some additional information about some goods and services that may impact on children learning how to read.
- This school was randomly selected for participation in this research. Your participation is very important, but you do not have to participate if you do not wish to.
- If you agree to participate, I will ask you some questions regarding your normal activities at school. My questions for you will take approximately 5-10 minutes.
- Your name will NOT be recorded on this form, nor mentioned anywhere in the survey data. The combined results of the reading assessment conducted in many schools will be shared with the ECZ and other education stakeholders. They will use the results to identify areas where additional support may be needed to improve reading in the early grades. Information provided in Teacher interviews will be anonymous and will not be reported by school, but will be combined with the survey results from many other schools.
- We believe there is no risk to you in participating in this research.
- You will not personally benefit from participating in this interview. However, your responses will be used to help support improvements in early grade reading in Zambia.
- If you have any questions regarding this research, please feel free to contact the ECZ.
- Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. Are you willing to participate?

Teacher provided consent (Circle to indicate consent was received): YES

If consent is refused, complete questions 1 through 3, thank the teacher, and end the interview.

1.	Starting time **[Use 24-hour time HH:MM]**	☐☐ : ☐☐
2.	Interview date **[DD/MM/YY]**	☐☐ / ☐☐ / ☐☐
3.	Interview status	Refused → **Thank teacher and end interview**.....1 Partially completed.....2 Completed 3
Now I would like to ask you a few questions.		
4.	How many years have you been a teacher?	**Please record the number here:** ☐☐ Don't know/Refuse..... 888

5.	What is the highest level of education you have completed?	Grade 7 (exam passed) .....1 Grade 8 .....2 Grade 9 (exam passed) .....3 Grade 10 .....4 Grade 11 .....5 Grade 12 (exam passed) .....6 BA/BS .....7 MA/MS.....8 Other (specify) ..... [ ] Don't know/Refuse..... 888

6.	What is your professional qualification?	Teacher certificate/diploma: Primary.....1 Secondary school teacher diploma.....2 Bachelor's primary.....3 None .....4 Other (specify) ..... [ ] Don't know/Refuse..... 888
I will first ask about this in-service teacher training.		
7.	How many in-service teacher training sessions for early grade reading did you receive over the course of the last 12 months?	**Please record the number here:** [ ] None .....0 Don't know/Refuse..... 888 **If None or Don't know/Refuse, go to question 9.**

8.	How useful did you find this training?	Very useful .....1 Somewhat useful .....2 Not useful at all.....3 Don't know/Refuse..... 888
There is a second kind of teacher training that I would now like to ask you about. I will call it coaching. By coaching I am referring to the training you may have received while you are in your class teaching. I am now going to ask you a few questions about this kind of teacher training.		
9.	How many distinct coaching visits for *reading* did you receive over the course of the last 12 months?	**Please record the number here:** ☐ None .....0 Don't know/Refuse..... 888 **If None or Don't know/Refuse, go to question 12.**
10.	On average, how many minutes did each coaching visit last? [*If teacher's response is an hour, please convert to minutes.*]	**Please record the number of minutes here:** ☐ Don't know/Refuse..... 888

11.	How useful did you find this coaching to be?	Very useful .....1 Somewhat useful .....2 Not useful at all.....3 Don't know/Refuse..... 888
I am now going to ask you about your reading lessons.		
12.	Do you have a scheduled time to teach reading to your class?	No.....0 Yes.....1

13.	How often do you teach reading to your class?	Never .....1 Once a week .....2 2 to 3 days a week .....3 4 to 5 days a week 4
14.	To what extent are you able to follow your weekly schedule for teaching reading?	Seldom .....1 Somewhat .....2 Mostly .....3 Always 4
15.	On average, how many minutes are your reading lessons?	Less than 20 minutes per lesson .....1 20 to 29 minutes per lesson .....2 30 to 39 minutes per lesson .....3 40 to 60 minutes per lesson .....4 More than 60 minutes per lesson 5
16.	Do you have the approved teachers' literacy guide?	No .....0 Yes .....1 **If Yes, go to question 17. If No, go to question 18.**
17.	If yes, how often do you use the teachers' literacy guide when you teach reading to your class?	Never .....1 Sometimes .....2 Most of the time .....3 Always 4

18.	If no, what other instructional materials do you use to teach reading? Check all that apply	Textbooks.....1 Worksheets.....2 Flashcards .....3 Storybooks .....4 Other supplementary materials 5
19.	How often do you use student reading materials in the <u>language of instruction</u> when you teach reading?	Never .....1 Sometimes .....2 Most of the time .....3 Always.....4
I am now going to ask you about continuous assessment.		
20.	Over the course of the last month, did you conduct continuous reading assessment exercise(s) with your students?	No.....0 Yes.....1 Don't know/Refuse..... 888 **If No or Don't know/Refuse go to question 22**
21.	**Ask the teacher to see their markbook. Then ask the teacher to show you some of the results of their continuous assessment activities. Count the number of students who were assessed by the teacher on their reading skills over the course of the last month.**	**Please record the number here:** ☐ No record was found ..... 0 Don't know/Refuse..... 888

22.	What language do you most frequently use to teach?	Chibemba.....1 Cinyanja .....2 Chitonga.....3 Kiikaonde .....4 Luvale.....5 Silozi.....6 Silunda .....7 English.....8 Other (specify) ..... Don't know/Refuse..... 888
23.	Are you satisfied with the level of parental support your students receive?	No.....0 Yes.....1 Don't know/Refuse..... 888

24.	I am now going to ask you about parental and community involvement. In particular, I would like to know if, <u>over the course of the last month</u>, any parents or members of the community have come to the school or even your classroom to do any one of the following things: **Please read each type of activity to the right and indicate the response of the teacher.**	Monitor student attendance No.....0 Yes.....1 Don't know/Refuse..... 888 Conduct classroom observations No.....0 Yes.....1 Don't know/Refuse..... 888 Monitor implementation of school projects No.....0 Yes.....1 Don't know/Refuse..... 888 Monitor the availability of textbooks No.....0 Yes.....1 Don't know/Refuse..... 888 Look at your record of continuous assessment No.....0 Yes.....1 Don't know/Refuse..... 888 Help you to teach reading in some way No.....0 Yes.....1 Don't know/Refuse..... 888 Other No.....0 Yes.....1 Don't know/Refuse..... 888
25.	Ending time **[Use 24-hour time HH:MM]**	☐☐ : ☐☐
Thank you very much.		

HEADTEACHER QUESTIONNAIRE

General Instructions

- Ask the Head Teacher to answer each question orally, as in an interview.
- DO NOT READ THE ANSWER OPTIONS TO THE HEAD TEACHER UNLESS THE INSTRUCTIONS INDICATE TO DO SO.
- Wait for the Head Teacher to respond to each question, then select the answer that corresponds to his or her response.
- For most questions, only one response is permitted. The instructions indicate the exceptions.
- If the Head Teacher is not available, conduct the interview with the Assistant Head Teacher.
- Note that all instructions to the interviewer are in **bold letters.**

School Name	
School EMIS Number	
Assessor Name	

Head Teacher Consent Form (Read aloud to the Head Teacher)
Hello, my name is _____. My colleagues and I are working with the Examinations Council of Zambia to conduct assessments of the reading ability of pupils in grade 2 in a sample of schools. This includes a reading assessment and a mathematics assessment.

- The purpose of the EGRA portion of the study is to assess the reading ability of pupils. As part of our research, we are also gathering some additional information about some goods and services that may impact on children learning how to read.
- This school was randomly selected for participation in this research. Your participation is very important, but you do not have to participate if you do not wish to.
- If you agree to participate, I will ask you some questions regarding your normal activities at school. My questions for you will take approximately 3-5 minutes.
- Your name will NOT be recorded on this form, nor mentioned anywhere in the survey data. The combined results of the reading assessment conducted in many schools will be shared with the ECZ and other education stakeholders. They will use the results to identify areas where additional support may be needed to improve reading in the early grades. Information provided in Teacher interviews will be anonymous and will not be reported by school, but will be combined with the survey results from many other schools.
- We believe there is no risk to you in participating in this research.
- You will not personally benefit from participating in this interview. However, your responses will be used to help support improvements in early grade reading in Zambia
- If you have any questions regarding this research, please feel free to contact the ECZ.

Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. Are you willing to participate?

Head Teacher provided consent (Circle to indicate consent was received): **YES**

If consent is refused, complete questions 1 through 3, thank the Head Teacher, and end the interview.

1.	Starting time **[Use 24-hour time HH:MM]**	☐☐ : ☐☐
2.	Interview date **[DD/MM/YY]**	☐☐ / ☐☐ / ☐☐
3.	Interview status	Refused → **Thank head teacher and end interview** ..... 1 Partially completed ..... 2 Completed 3

4.	What is your position at the school?	Head Teacher ..... 1 Deputy Head Teacher..... 2 Senior Teacher..... 3 Neither..... 4 **If neither, please thank the person and end the interview**
5.	How many years during your career have you been a Head Teacher?	Number of years ..... ☐
6.	What is the highest level of education you have completed?	Grade 7 (exam passed)..... 1 Grade 8..... 2 Grade 9 (exam passed)..... 3 Grade 10..... 4 Grade 11..... 5 Grade 12 (exam passed)..... 6 BA/BS..... 7 MA/MS ..... 8 Other (specify) ..... ☐ Don't know/Refuse..... 888

7.	What is your professional qualification?	Teacher certificate/diploma: Primary ..... 1 Secondary school teacher diploma ..... 2 Bachelor's primary ..... 3 None ..... 4 Other (specify) ..... [ ] Don't know/Refuse 888
Now I have some questions about school records and resources.		
8.	At the beginning of this school year, did your school have the appropriate number of textbooks for your students, according to current Ministry policy?	No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 **If yes, skip to question 10**
9.	If no, how long after the beginning of the school year did you receive the missing books?	Never received them ..... 0 1 year ..... 1 10 to 11 months ..... 2 8 to 9 months ..... 3 6 to 7 months ..... 4 4 to 5 months ..... 5 2 to 3 months ..... 6 1 month ..... 7 1 week or less ..... 8 Don't know/Refuse 888

10.	I am now going to ask you about parental and community involvement. In particular, I would like to know how many times during the last term a parent or member of the community came to your school to do any one of the following things. **Please read each type of activity to the right and indicate the response of the Head Teacher.**	Monitor student attendance No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 Conduct classroom observations No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 Monitor implementation of school projects No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 Monitor the availability of textbooks No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 Look at your record of continuous assessment No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 Help you to teach reading in some way No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 Other No ..... 0 Yes ..... 1 Don't know/Refuse 888

11.	Within the last 12 months, how frequently did your school receive a reading teacher professional development coaching visit from a Zone or District Officer?	Never ..... 0 Once ..... 1 More than once a month ..... 2 Once every month ..... 3 Once every week ..... 4 Don't know/Refuse 888
12.	Are any students with disabilities enrolled in this school?	No ..... 0 Yes ..... 1 Don't know/Refuse 888
Now I have some questions about early child education (ECE) classes.		
13.	Does the school have an active ECE class(es)?	No ..... 0 Yes ..... 1 Don't know/Refuse ..... 888 **If yes, go to question 14. If no or don't know, skip to question 22.**

14.	What year did you establish the first ECE class at the school?	2012 or before ..... 1 2013..... 2 2014..... 3 2015..... 4 2016..... 5 2017..... 6 2018..... 7 Don't know/Refuse 888
15.	How many ECE classes are there at the school?	One..... 1 Two..... 2 Three ..... 3 Four or more 4

16.	What type of structure is used for ECE class(es)?	Built classroom..... 1 Container converted into classroom..... 2 Informal structure (no walls, some roof structure) ... 3 ECE classes held out in the open..... 4 Other (specify) .....
17.	Has the MOGE provided an ECE teacher per class?	No..... 0 Yes ..... 1 Don't know/Refuse 888

		If yes, go to question 18. If no or don't know, skip to question 19.
18.	If yes, has the ECE teacher received specific ECE training?	No ..... 0 Yes ..... 1 Don't know/Refuse 888
19.	Has the MOGE provided training specifically to equip the Head Teacher on how to manage ECE at the school?	No ..... 0 Yes ..... 1 Don't know/Refuse 888
20.	Has the MOGE provided books specifically for the ECE class(es)?	No ..... 0 Yes ..... 1 Don't know/Refuse 888
21.	Has the MOGE provided other ECE resources specifically for ECE class(es)?	No ..... 0 Yes ..... 1 Don't know/Refuse 888
22.	Ending time **[Use 24-hour time HH:MM]**	☐☐ : ☐☐
Thank you very much!		

SCHOOL INVENTORY

School Name	.....
School EMIS Number	.....
Assessor Name	.....
Assessor Code	.....
Supervisor Name	.....
Supervisor Code	.....
Supervisor Signature	.....

1.	Starting time **[Use 24-hour time HH:MM]**	:
2.	Observation date **[DD/MM/YY]**	Range: Date should not be before or after the dates of data collection / /
3.	Observation status	Refused ..... 1 → **End observation** Partially complete ..... 2 Complete 3
4.	Are the school buildings and surroundings clean and neat?	No ..... 0 Yes 1

5.	Are major repairs needed?	No ..... 0 → **If no, skip to 7** Yes 1
6.	**If yes**, indicate all the types of repairs needed. **[Circle all that apply.]**	Broken windows ..... 1 Roof or ceiling ..... 1 Walls of classroom ..... 1 Outside school walls in disrepair ..... 1 Playgrounds ..... 1 Furniture ..... 1 Other (specify) ..... 1 _____
7.	Does the school have a source of electricity? **If yes**, is it functioning today?	No ..... 0 → **If no, go on to 8** Yes, but not functioning today ..... 1 Yes, and functioning today 2

8.	What drinking water source does the school have?	None ..... 0 → **If none, skip to 10** Well ..... 1 Filter/Cooler ..... 2 Other (specify) ..... 3 _____
9.	Is the drinking water source working? **[i.e., Is water available during your visit today?]**	No ..... 0 Yes 1

10.	How many functional toilets / latrines are there? **[A functioning toilet is one that can be used; if a flush toilet, the flush mechanism is working.]**	Range: 1-99 [if >20, ask assessor to confirm number] Toilets → **If zero, skip to 13**
11.	Of the functional toilets / latrines, how many (if any) are for girl students only?	Range: 1-99 [if >20, ask assessor to confirm number] Toilets
12.	Are toilets / latrines clean?	Not at all clean ..... 0 Somewhat clean ..... 1 Very clean 2
13.	Is there a functioning telephone? **[Circle all that apply.]**	None ..... 0 Yes, there is a land line ..... 1 Yes, the head teacher has a cell phone ..... 1 Other (specify) ..... 1 _____
14.	Is there a school library? **If yes**, are students using the library at the time of the visit?	No, there is not a library ..... 0 → **If no, go on to 15** Yes, but no students are using it ..... 1 Yes, and students are using it 2

15.	Is there a playground?	No ..... 0 Yes 1
16.	Is there a wall around the school?	No ..... 0 Yes 1

17.	Is there a security guard?	No .....0 Yes 1
18.	Ending time **[Use 24-hour time HH:MM]**	:

ANNEX 12: SCOPE OF WORK

C.1 ACTIVITY TITLE

The activity title is **USAID EDUCATION DATA**.

C.2 PURPOSE

The purpose of the USAID Education Data Activity is to provide distinct assessment, data management, research and evaluation services to monitor and track the progress of USAID's Let's Read Zambia bilateral activity (formerly known as Sustainable and Effective Education Delivery).

C.3 BACKGROUND

Zambia's education system faces daunting challenges in its ability to provide adequate and quality education services. A high pupil-teacher ratio (59:1), high pupil-textbook ratio (10 pupils per book), and extremely poor learning outcomes in critical areas such as reading and math are compounded by a weak education management system and poor infrastructure. Since school fees were abolished in 2002, Zambia has made significant gains toward ensuring near universal access to primary education to the approximately 3.2 million children enrolled in grades 1-7[21], yet learners reading levels remain low, particularly in community schools which serve 20 percent of the most economically disadvantaged children. Only 30 percent of children who enter the school system manage to complete the education cycle through grade 12. The poor quality of education has exacerbated inequities for girls and disadvantaged children in general. Given the learner demographics, teacher qualifications, and resource challenges facing most Zambian schools, improving learning outcomes is critical.

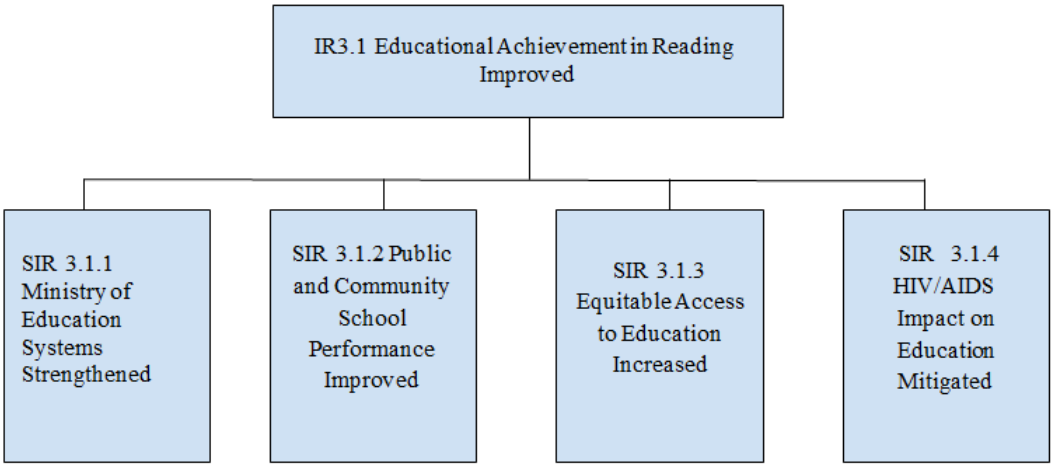
The Early-Grade Reading Assessment (EGRA) was first administered in Zambia in 2011-2012 to students in several targeted provinces but not on a national scale. The results revealed that 90% of children in grade 2 and 70% in grade 3 were not able to read one word in the local Zambian language. Further, the Zambia Grade 5 National Assessment Survey is conducted every two years and has consistently shown learning achievement below 40th percentile in both English and Zambian languages. In addition, the Southern African Consortium for Monitoring Education Quality (SACMEQ) of 2010 indicated that among the Grade 6 learners that were tested in reading, only 27.4 percent were able to read at a basic competency level. In 2014, USAID contracted Research Triangle Institute (RTI) to work with the Examination Council of Zambia (ECZ) to conduct the first national EGRA baseline, which revealed that Zambian students were still performing below average. The previous EGRA report is provided.

In order to address the low literacy levels among learners, the MOGE developed a national literacy strategy of teaching reading in local languages and also introduced these local languages as a medium of instruction in grades one through four. The MOGE shifted the focus from access to quality learning with assessment data providing the critical role of tracking the progress of student learning over time. Timely information on student reading achievement and its implication for future learning provides a basis for dialogue to inform policy and decision making among education leaders.

USAID/Zambia Education efforts over the past 5 years have focused on early grade reading interventions to confront these challenges. These programs included STEP-Up, Read to Succeed, Time to Learn, Zambia EdData and other Government to Government agreements. These USAID funded activities were designed to *Improve Educational*

[21] Republic of Zambia, Ministry of Education, Science, Vocational Training and Early Education: Educational Statistical Bulletin 2015

Achievement in Reading by 2017 through (1) strengthening the systems of the Ministry of General Education, (2) improving the performance of public and community schools, (3) increasing equitable access to education for all students and, (4) mitigating the impact of HIV/AIDS on the education sector. The efforts over the last five years, as well as the future efforts are rooted in the development hypothesis that if time spent on reading instruction is sufficient; if children are taught to read in a language that they speak and understand; if there are enough and relevant teaching and learning materials in the seven local languages; if teachers are well-trained, mentored, and coached to teach and formatively assess reading acquisition in local languages using the appropriate approaches; if the education system is adequately equipped to test early grade reading skills and report and analyze results; if the MOGE has the appropriate capacity to implement and manage resources at all levels; and if families and communities are involved in the education of their children; then early grade students will be able to read with fluency and comprehension at grade level. The development hypothesis is depicted in the results framework below:



C.4 SUCCESS

Success will be measured by the completion of two Early-Grade Reading Assessments (EGRA) for children in Grade 2 measuring reading levels, during the three years and six months contract period. Upon completion of each EGRA, proper dissemination and learning will be critical for the wider USAID and stakeholder audience in Zambia to apply lessons learned and trends to future programming.

C.5 KEY STAKEHOLDERS

Implementation of this activity will require coordination and collaboration with key stakeholders. The following list provides key stakeholders and their respective roles and responsibilities within the USAID Education Data Activity:

Table 1: Key Stakeholder Listing

Stakeholder	Role
USAID/Zambia	USAID/Zambia will have oversight of the performance of the Contract. USAID/Zambia will serve as a liaison between the Contractor and MOGE, and will obtain necessary approvals to facilitate data collection and other EGRA related activities in the provinces, districts and schools. The Education Office will work with the Contractor to disseminate EGRA findings to various stakeholders.

Ministry of General Education (MOGE)	The MOGE will be involved and consulted during activity planning and implementation to ensure alignment with policy provisions and institutionalization of EGRA related activities in the education system. The Contractor must work closely with the MOGE's Directorate of Planning and Information Management and Directorate of Curriculum and Standards, to inform, develop and/or finalize the content of instruments, and ensure alignment of school level data with the Education Management Information System (EMIS). The MOGE will coordinate provincial, district, zonal and school level activities. In addition, the directorates will collaborate with the Contractor to disseminate EGRA findings to the lower levels of the education system.
Examination Council of Zambia (ECZ)	As an institution mandated to conduct Zambian national assessments and examinations, the ECZ will be involved at all stages of EGRA activities; i.e., from the preparation of surveys to dissemination of EGRA findings both at national and regional levels. Working in close collaboration with the Contractor, the ECZ's role will involve, but not be limited to, selecting representative samples for the EGRA, developing and/or finalize the content of instruments, identifying data collectors/assessors; assist to develop, pre-test and finalize survey instruments; collect and analyze assessment data and organize meetings/fora to disseminate EGRA findings to relevant stakeholders.
Provincial Education Offices and District Education Board Secretary Office,	The Provincial and District Education Offices will work with the Contractor to coordinate sub national level activities, which include: preparation for EGRA surveys, identification of assessors and providing necessary authorizations, supporting data collection processes and regional dissemination workshops. As implementing units of education programs, the provincial and district levels will use EGRA findings for planning, management, monitoring and evaluation of education projects.
Target Schools	These are the intended primary beneficiaries of the Let's Read Zambia activity from which the EGRA sample will be drawn. In addition to providing USAID, MOGE and other education stakeholders with information on reading outcomes, ultimately the EGRA findings are expected to inform decision making and management processes at the school level.
Cooperating Partners (Irish Aid, JICA, UNICEF, World Bank & China Fund-in-	These include other donors providing funds for education activities independently but aligned with the objectives of the Let's Read Zambia activity. In addition, donors such as JICA could potentially fund the mathematics component of Early Grade Assessments to complement the USAID funded reading assessment. Therefore, collaboration with these stakeholders will be necessary to ensure alignment of activities.

C.6 LINK TO OTHER PROGRAMS

This activity will conduct the baseline and midline surveys for the separate bilateral USAID Let's Read Zambia Early Grade Reading activity. Let's Read Zambia will work approximately 4,250 schools of which 1,281 have Early Childhood Education annexes or units, across five Provinces (Western, Eastern, Muchinga, North Western and Southern Province). The five Provinces have approximately 425 zones, made up of a cluster of approximately 10 schools within each zone. The school focus will be on Pre-Grades through Grade 3. Let's Read Zambia's focus will be to provide the target school students with the opportunity to learn to read grade level text with

comprehension in the seven local official languages of instruction as described in Table 2.

Table A1: Official Languages of Instruction in the Five target Provinces:

Province	Official Language of Instruction
Eastern	Chinyanja
Western	Silozi
Muchinga	Icibemba
North Western	Lunda, Luvale, Kiikaonde
Southern	Chitonga[22]

C.7 SCOPE

The USAID Education Data Activity will focus on two main areas:

1. EGRA: The EGRA will be administered at the baseline and midline for the upcoming USAID Early Grade Reading activity. Through the EGRA, USAID will be able to determine if the USAID Early Grade Reading activity is helping to ensure that children are reading at grade level.

To ensure that the assessment planning and implementation are sustained by the government, the contractor must work closely with ECZ. The Contractor must build on the work done by RTI, the *Read to Succeed* and *Time to Learn* activities to strengthen the ECZ's capacity to conduct future EGRA.

2. Research services: Four distinct research studies will be conducted to inform USAID and MOGE programming needs. This is discussed in Section.C.8.

C.8 TASKS

The tasks under this activity are to:

Complete a language mapping exercise;
Complete preparation for the Early-Grade Reading Assessment (EGRA);
Complete pilot assessment;
Finalize EGRA instruments;
Train EGRA Assessors;
Conduct EGRAs;
Complete data entry, analysis, and build ECZ's capacity;
Disseminate EGRA results to key stakeholders; and
Conduct Research Studies;

[22] Parts of Kazungula district is predominantly Silozi speaking

TASK 1: LANGUAGE MAPPING EXERCISE:

The Contractor must ascertain whether the predominant language of instruction within each District, and if possible school level, is as depicted in Table 2, under C.6 of this section. The purpose of this exercise is to inform the Contractor to be able to administer the EGRA in the GRZ designated language per Province; however, also have the ability to administer the EGRA in a different GRZ designated language(s) if the Contractor identifies that is the language of instruction in the particular school/district. The Contractor must verify GRZ designated language(s) of instruction at the school level through the Baseline and adjust the language mapping based on findings. If the Contractor finds instances where the language of instruction is outside of the GRZ designated languages, they must validate and document such findings through the baseline.

TASK 2: PREPARATION OF DRAFT INSTRUMENTS TO CONDUCT EGRA:

Through the Research Triangle Institute (RTS) implemented EdData II activity, a framework/toolkit (link provided in Section J) was developed to serve as a resource on EGRA instruments development and adaptation for Zambia. Building on this work, the Contractor shall review and if necessary, update the EGRA Framework to ensure that best practices and lessons learned at baseline and midline are incorporated.

The Contractor must prepare for the EGRA by working with the USAID, MOGE, and ECZ in order to define the components listed below. The coordination with the three stakeholders will result in a draft standardized instrument for the contractor to carry out the EGRA within the GRZ designated languages of instruction.

EGRA Components:

Component 1: For the learners (Child)

Letter-sound Identification: The ability to produce the sound of a letter fluently that is presented in written form. It is timed to one minute.
Syllable naming fluency: The ability to identify the most commonly occurring syllables in a particular language. It is timed to one minute.
Invented (nonword) Reading: ability to "decode" unfamiliar words. The "nonwords" are decodable, are 'legal' words, and are fictional. It is timed to one minute.
Oral reading fluency: The ability to quickly and accurately read connected text on a page with the passage written for an end of grade 2 difficulty level. It is timed to one minute.
Reading Comprehension: The ability to orally respond to both literal and inferential questions about the Oral Reading Fluency passage read. This component does not have a time limit.
Listening comprehension: The ability to comprehend an orally presented story and provide an oral response to question asked. This component does not have a time limit.
English listening comprehension: The ability to comprehend an orally presented story and provide an oral response to question asked. This component does not have a time limit.
English Vocabulary: The ability to identify body parts, objects in the environment, and simple prepositions presented in English. This component does not have a time limit.

Component 2: Snapshot for School Management Effectiveness (SSME)

This component of the EGRA will produce a comprehensive picture of a school's learning environment, and when the results from multiple schools in a region are compared, it becomes possible to account for differences in school performance. Using information generated through the SSME component, school district, provincial and/or national administrators can learn what is occurring in schools and classrooms and assess how to make their schools more

effective. Among others, the complementary instruments will target education administrations including, head teachers, teachers and zonal personnel.

School Profile:

Along with the components above, the contractor must collect and update the following data on each school where the EGRA is conducted:

Name of school
Name of head teacher
Contact details
Location (Province, district and zone)
Type of school (community or public, with or without Early Childhood Education(ECE)
GRZ Designated Language of Instruction
Education Management Information System (EMIS) number
Total number of students (disaggregate by sex, grade)
Total number of teachers (disaggregated by sex/trained by Let's Read Zambia)
Literacy teaching and learning materials (Pupil: book ratio)

USAID Indicator:

ES.1-1	Percent of learners who demonstrate reading fluency and comprehension of grade level text at the end of grade 2 with USG assistance

USAID may require additional indicators that will be identified through the life of the award, if applicable.

Component 3: Oral Language Module

This component will produce baseline data through a small pilot in one GRZ designated language to be administered orally during EGRA baseline. The Oral Language Module pilot assessment will help understand whether the children both speak and understand the language to determine whether the learner understands what he/she is being asked and his/her ability to follow directions in the assessed language, and to identify the logical expression of ideas arising from visual stimuli associated with events or stories.

TASK 3: EGRA PILOT ASSESSMENT

A small-scale assessment will be undertaken with the draft EGRA for all GRZ designated languages of instruction. No more than 15 schools in total that represent the GRZ designated language of instruction will be assessed in this Task, on average two schools per language. The pilot assessment will allow the contractor to understand if the draft EGRA needs updating and/or if the components need further improvement to properly measure reading performance at Grade 2.

TASK 4: FINALIZATION OF THE INSTRUMENTS TO CONDUCT EGRA

The Contractor must provide the feedback from the pilot assessment to USAID, MOGE, and ECZ and apply lessons learned to finalize the standardized instruments to be used in the EGRA.

TASK 5: ASSESSOR TRAINING

Each EGRA must be administered by an assessor not associated with the school. The Contractor's approach to administering the EGRA must ensure the child's comfort and provide an environment which is conducive to obtaining needed information under each component. The Contractor is responsible for identifying and providing rigorous training to the assessors. A key consideration in the recruitment of assessors must be familiarity with the local language of instruction.

Few assessors must also be trained to conduct oral language module in one GRZ language during EGRA baseline.

TASK 6: CONDUCT EGRA

The Contractor must conduct EGRAs in an electronic format via tablets or other electronic means. The contractor is responsible for random sampling for about 800 schools during baseline and up to 25 percent of approximately ,250 schools at midline. The schools are located in the 425 zones in 56 districts in the 5 target provinces. The Contractor's random student sampling must consist up to 20 students per school. Prior to conducting the EGRA, the contractor must provide the random school listing and schedule to USAID to obtain proper approvals from the MOGE.

Each EGRA must be administered in the GRZ designated language of instruction for the province. However, if it is determined that multiple GRZ designated languages of instruction are in use, the contractor must be able to administer the EGRA in each GRZ designated language and document instances where the Provincial GRZ designated language of instruction do not match the school level language of instruction in use.

Also, during the EGRA baseline, the contractor will adapt an Oral Module Tool into one GRZ language and conduct a small-scale pilot assessment in one GRZ designated language of instruction. Up to 10 schools covering up to 200 Grade 2 learners in total will be assessed through this pilot.

Each EGRAs must be completed by November 30th. The following schedule is developed for the anticipated EGRAs:

Base-Line	The Base-Line and Oral Language Pilot is to be started within six months after award and completed by December 30th.
Mid-Line	The Mid-Line will be timed after about two years of implementation under Let's Read Zambia.

The Contractor must work with ECZ to help transition the ability to lead, manage, and execute the EGRA over time. USAID expects that the Contractor must be the lead on the Base-Line, allowing ECZ to shadow all aspects of the EGRA. For the Mid-Line, USAID expects the Contractor to identify specific tasks for ECZ to complete in conjunction with the contractor that make up approximately 50% of the EGRA. Through the proposed transition approach, the Contractor in consultation with USAID will determine the roles and responsibilities to gradually transfer to the ECZ. The Contractor must immediately notify USAID if ECZ is unable to take on any responsibilities and ensure that all EGRAs are completed. The ultimate responsibility for timely completion of EGRA and data analysis is with the Contractor.

TASK 7: DATA ENTRY, ANALYSIS, AND ECZ CAPACITY BUILDING

The Contractor must analyze and consolidate data to produce the final EGRA reports. The Contractor must involve ECZ and MOGE experts to foster sustainability of the project and build capacity within the Ministry for data

collection and analysis. All data collected must be stored on the Development Data Library (DDL) and the USAID Secondary Analysis of Results Tracking (SART Ed) Portal https://usaideducationdata.org/sart/.

ECZ will specifically need capacity building in data collection and analysis, conducting large scale assessments and data management. The Contractor must develop a transition/capacity building strategy clearly outlining the proposed transfer of roles and responsibilities over the three years and six months contract period. The plan must document what the ECZ would require to conduct similar surveys in future and, must include a tentative implementation plan and estimated costs for routine and nationally representative EGRA.

TASK 8: DATA DISSIMINATION

After each EGRA, the Contractor must disseminate findings and analysis to a larger stakeholder audience. The dissemination meetings will address the findings as they relate to the intended learning outcomes of students and the proposed performance targets/indicators for Let's Read Zambia. USAID expects the same approach as stated under Task 6; whereby, the contractor must work to have ECZ become the lead in disseminations and only provide administrative and technical oversight towards the final EGRA dissemination meeting.

Base-Line	Provincial/District/Zone Dissemination
Mid-Line	National/Provincial/District Dissemination

TASK 9: RESEARCH STUDIES

The Contractor will provide up to four (4) distinct research projects. The Contractor must work closely with USAID and the MOGE to determine which of the areas of research listed below and/or any other study areas identified which would be most beneficial to address programming needs and provide the best support to address the problems faced by the MOGE. The contractor must then help the MOGE conduct this research. This will include both desk review and primary research on topics that directly impact learner outcomes in early grade reading in Zambia. Potential areas of research would include:

- The value-added of students using technology to improve learners' performance; A comparison of the impact on student learning with teacher use of tablets with lesson plans and coaching guidance vs. student use of tablets;
- A study that follows Kindergarten students over time to determine the impact of emergent literacy skills interventions; and,
- A study on the threshold when students should transition from Language one (L1) to Language two (L2) or from the local languages to English.
- A study on association between Oral Language and Oral Reading Capacity of Grade 2 learners

C.9 GENDER

The USAID/Zambia's gender analysis identified that gender bias and inequitable learning conditions in Zambian schools continue to undermine educational achievement for both boys and girls. Poor educational outcomes exacerbate gender inequalities and often leave young Zambians with few skills of the ability to participate in the economy. The national EGRA baseline conducted in November 2014 identified that there are only minimal achievement differences between boys and girls in the early grades. It is more cost-effective to address the causes for the divergence in learning outcomes in the early grades when these differences are small than to wait for girls to drop out, repeat, or fail their school exams. It is expected that the Contractor must assess the extent to which Let's Read Zambia ensures that learning gains benefit both males and females and in all language groups. Let's Read Zambia will help reduce perceived learning gaps along gender and linguistic groups. The report must describe ways in which Let's Read Zambia is working to narrow gaps between boys and girls and among the different languages of

instruction and any success or challenges encountered. Data must also be disaggregated by sex, type of school and other categories required by USAID.

C.10 ENVIRONMENTAL COMPLIANCE

The Foreign Assistance Act of 1961, as amended, Section 117 requires that the impact of USAID's activities on the environment be considered and that USAID include environmental sustainability as a central consideration in designing and carrying out its development programs. This mandate is codified in Federal Regulations (22 CFR 216) and in USAID's Automated Directives System (ADS) Parts 201.5.10g and 204 (http://inside.usaid.gov/ADS/200/204.pdf), which, in part, require that the potential environmental impacts of USAID-financed activities are identified prior to a final decision to proceed and that appropriate environmental safeguards are adopted for all activities.

The USAID Zambia Education Initial Environmental Examination (IEE) has a Categorical Exclusion for the Intermediate Result (611-IR3.1) Educational Achievement in Reading Improved. The IR is supported by four sub-IR: (3.1.1) Ministry of Education Science, Vocational Training and Early Education (MESVTEE) systems strengthened; (3.1.2) Public and community school performance increased; (3.1.3) Equitable access to education increased; and (3.1.4) HIV/AIDS impact on education mitigated.

A Categorical Exclusion is recommended for activities under sub-IR's 3.1.1, 3.1.2, 3.1.3, 3.1.4 under Program Element 3.2.1 Basic Education, involving education, technical assistance, or training programs (as per 22 CFR 216.2(c)(2)(i)); analyses, studies, academic or research workshops or meetings (as per 22 CFR 216.2(c)(2)(iii)); document and information transfers (as per 22 CFR 216.2(c)(2)(v)); studies, projects or programs intended to develop the capability of recipient countries to engage in development planning (as per 22 CFR 216.2(c)(2)(xiv)); and regulatory and policy related activities that have no physical interventions and no direct effects on the environment (as per 22 CFR 216.2(c)(1)(i)).

Activities under Program Element 3.2.1 Basic Education, involve education, technical assistance, or training programs; analyses, studies, academic or research workshops or meetings; document and information transfers; studies, projects or programs intended to develop the capability of intended beneficiaries or local governance structures to engage in development planning; and regulatory and policy related activities that have no physical interventions and no direct effects on the environment. These activities are recommended for a Categorical Exclusion under 22 CFR 216.2(c)(1)(i) and 22 CFR 216.2(c)(2)(i), (iii), (viii) and (xiv). See above citations

The Contractor must comply with the stated environmental regulations. The program managers and the Contractor must take measures to ensure such information sharing does not promote practices that would negatively impact the environment and that the information sharing sessions themselves have negligible impacts on the environment.

C.11 SUSTAINABILITY

To ensure sustainability, the Contractor must build the institutional and human capacity of the ECZ to independently conduct national early grade reading assessments and provide timely information about student reading competencies. The Contractor must train ECZ Officers in developing EGRA contextual questionnaires, data collection and analysis using agreed upon software, large scale assessment and data management. Institutionalized capacity building is in line with the USAID Education Project's two main hypotheses: (1) improving the overall quality of primary education requires improving basic reading skills in early grades; and (2) facilitating host country leadership of the development agenda is critical for long-term sustainability and true sector-wide impact.

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